Monitor

REGISTERED TRADE-MARK

RICE MACHINERY



Catalog No. 67

Monitor

REGISTERED TRADE-MARK

RICE MACHINERY



ESTABLISHED 1879

HUNTLEY MANUFACTURING CO.

SILVER CREEK, N. Y., U. S. A.

The World's Largest Manufacturers
of High Class Grain and Seed
Cleaning and Grading Machinery.

CATALOG No. 67

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of Elma New York USA
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Monitor CLAIMS

REGISTERED TRADE-MARK

For Each "Monitor" Machine Shown In This Catalog We Claim:

FOR the work intended; no other machine so efficient as a whole, so scientifically applicable, so economical to the user in performing uniformly perfect work—For the construction; decidedly the heaviest known, of best materials procurable and with a quality of skilled workmanship unsurpassed—For general design and arrangement; pronounced simplicity—For ease of regulation; close, positive adjustments for every operating part, and perfect manipulations—For endurance; the utmost in durability—For general operating expense and cost of upkeep; figured in direct proportion to the quality and quantity of work handled—less power, care and attention, fewer renewals.

Monitor GUARANTEE

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EACH "Monitor" shown in this catalog has this unqualified guarantee—performance and service to equal every claim set forth above.

Monitor OFFER

REGISTERED TRADE-MARK

TO responsible parties anywhere in the United States we will ship any "Monitor" machine shown herein—with the understanding that if machine is set up and operated according to our directions it will operate in accordance with our claims. If for any reason a "Monitor" fails to do so, we are to be notified at once with privilege of adjusting it to a point where results equal our claims.

WHO WE ARE

RICE cleaning and grading machinery is more or less a specialty. Therefore, those who successfully manufacture and market machinery of that character, are specialists in them. The degree in which this applies is best shown by the number of machines made as compared with others.

In 1879, we started in the manufacture of cleaning and grading machines. Our growth has been steady and rapid, keeping step with our experience. Today, not only are more MONITORS built, sold and used, than all others, but in them from year to year is carried out new improvements and ideas which can have a place in such machines.

One of the factors making this possible is our engineering department. The individuals making up this department are not only inventors—they are authorities on the subject of cleaning and grading, to the extent that when they place their O. K. on a new model or improvement, it is sure to be a success.

Right at the start, it was realized that no success could be lasting unless based on a policy of fair and courteous treatment to all. The small consumer and the large is equally entitled to a square deal and he gets it from the MONITOR. Our guarantee covers everything made by us and one man's money will buy as much as another's.

There is nothing experimental in the MONITOR line. Machines and improvements are worked out to a practical finish before they are offered to buyers. After passing the designing department, they are worked out practically, making them certain before they are accepted as a part of a finished MONITOR. Every claim for the MONITOR will stand the most severe investigation for no claim is made until we know that the facts will support it.

We further offer in the MONITOR machines, simplicity, reliability, durability and economy combined in such a way as to produce a finished machine, that is by reason of these features, the cheapest-in-the-end purchase that can be made. Our references are our users—they are legion in number and there is no distinction between them. They all eagerly testify to the high merit of the MONITOR machines.

HUNTLEY MANUFACTURING CO.

SILVER CREEK, N. Y.

MONITOR

RICE SEPARATORS AND CLEANERS

(Rough Rice Cleaners—Rice Chaffers)

STYLES "E," "C," "B," "A"

ADVANTAGEOUS FEATURES

THOSE who handle rice—the planter, the rice merchant or the rice miller—have each a different problem when it comes to separating and cleaning. Some planters roughly clean their rice before shipping it, removing some (usually not enough) of the straw, coarse impurities, light chaff, foul seeds, fine dirt, etc., others do not clean at all. The rice merchant desires to clean the rice he handles to improve its appearance and increase its market value—often he has a different cleaning proposition than that of the planter. And again, there is the rice miller who cleans with the desire to rid the rice of all remaining impurities—his is the last cleaning; it must be thorough. Adaptable to every range of cleaning work, the "Monitors" shown on pages 7 to 13 possess qualities which make them a big asset to either the planter, merchant or miller—they are perfect cleaning cleaners whether used for rough, intermediate or fine cleaning. With these "Monitors" quick changes and perfect manipulations are a feature—their simple, accessible mechanism and precise, accurate adjustment give the user perfect ease of regulation for every class of cleaning. "Monitor" Air Work (patented) is unlike that of any other cleaning machine—separations are closer controlled, much more uniform and far less wasteful. Each "Monitor" has large screen surface, all screens interchangeable, easily changed—heavily built and finely fitted. "Monitor" Cleaners actually require less power than any machine designed for similar rice cleaning work. Whether used as Rough Rice Cleaners or Rice Chaffers any of the four styles of "Monitors" shown on pages 7, 9, 11 and 13 will easily and continuously deliver the most in perfect cleaning for the least in operating expense.

MONITOR CONSTRUCTION

Unquestionably "Monitor" construction is the heaviest and most durable type to be found today in rice cleaning machinery. Superb workmanship, precise fit and simplified arrangement are noteworthy features. Main supporting frames are made of heavy, A-1 quality, air-dried hardwood; they are machine mortised and tenoned, stayed with heavy joint bolts having locked nuts. All other lumber used is high grade, thoroughly seasoned, selected stock. Screws are used in preference to nails wherever possible. All castings are high grade gray iron—each piece passing close inspection. Collars and pulleys are carefully fitted and machine faced. Shaking shoes are our exclusive "Monitor" style of inter-reinforced construction. All shafts are of large diameter (none made heavier), high grade steel, accurately machine sized. Everywhere throughout provision is made for the maximum of extreme strength and durability. For further details of construction see "Equipment" given under illustrations of machines.

SPECIAL NOTE:—All "Monitor" bearings are fully exposed and comply with the latest rulings of Fire Insurance Underwriters.

MONITOR

RICE SEPARATORS AND CLEANERS

(Rough Rice Cleaners—Rice Chaffers)

STYLES "E," "C," "B," "A"

HOW THEY OPERATE

RICE is delivered into feed hopper and gravitates to automatic feeder in lower part; this feeder delivers the rice in a thin, even stream across the entire width of the first air suction leg—here the first air separation is performed. As the rice drops down the suction leg it passes through strong currents of air created by and traveling upward to the fans, these draw off all light impurities, chaff, dust, etc., carrying them into a settlings chamber where an intermediate separation takes place, the screenings being purified and dropping into a conveyor which discharges them at outside of machine; the dust and light chaff are carried on, reaching the fans, which blow them out.

The rice drops through the suction leg onto a distributing plate and thence to a scalper or roughing screen where stones, sticks, strings and coarse refuse are taken off. The rice passes through the holes in this screen to an adjustable spreading attachment which equalizes the stream, spreading it evenly across the entire surface of the second or main cleaning screen; coarse, foreign matter, everything larger in size than the rice, travels on top of the screen, discharging at lower end and out to side of machine, while the rice passes through the screen perforations and falls upon the third or seed and sand screen. Fine dirt, sand, foul seeds, etc., go through the small perforations in this screen and are spouted out underneath machine, while the stream of rice travels over entire surface of screen, tailing off at lower end in an even stream through an adjustable gate into second air suction leg, where the second air cleaning is performed. The air currents to the fans draw off any remaining dust or chaff and the heavier of the light impurities not removed by the first air separations —dust and chaff blown out of fans, heavier stock discharged from conveyor at side of machine. After this aspiration the cleaned rice discharges from suction leg at a point close to the floor.

OPTIONAL EQUIPMENT

The screenings conveyors under settlings chambers may be arranged to discharge at either side of machine as desired. Fan discharge can be changed from that shown in cuts—illustrations show rear, horizontal discharge of fans, as regularly built; this may be changed to discharge up at any angle, or reversed and discharge out horizontally over front. When necessary we can change the size of drive pulley from that shown in the tables; drive pulley can be placed at either side of machine, but must be on same side as conveyor discharge.

MONITOR RICE SEPARATOR AND CLEANER

STYLE "E"

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	0	1	2	3	4	5	6	7	8	9	10
Extreme height	5' 1"	5' 5"	6' 1"	6' 6"	7' 0"	7' 7"	8' 0"	8' 2"	8' 2"	9' 2"	9' 2"
Extreme length	5' 0"	5' 4"	6' 3"	6' 8"	7' 0"	7' 6"	8' 1"	8' 11"	8' 11"	10' 2"	10' 2"
Extreme width	3' 7"	4' 0"	4' 7"	5' 2"	5' 11"	6' 8"	7' 0"	7' 6"	8' 3"	9' 3"	9' 9"
Length on floor	4' 4"	4' 8"	5' 4"	5' 8"	6' 1"	6' 7"	7' 1"	8' 0"	8' 0"	9' 0"	9' 0"
Width on floor	2' 3"	2' 7"	3' 2"	3' 8"	4' 2"	5' 0"	5' 1"	5' 5"	6' 0"	7' 1"	7' 7"
Height to where rice enters	4' 9"	5' 1"	5' 5"	5' 9"	6' 2"	6' 10"	7' 2"	7' 11"	7' 11"	8' 9"	8' 9"
Height to center of drive pulley (fan shaft)	3' 8"	4' 2"	4' 7"	4' 11"	5' 4"	5' 8"	6' 0"	6' 2"	6' 2"	6' 9"	6' 9"
Height to center of shaker shaft	0' 9"	0' 10"	1' 0"	1' 2"	1' 4"	1' 6"	1' 8"	2' 0"	2" 0"	2' 9"	2' 9"
Speed — Revolutions per minute of fan (driving) shaft	650	600	600	600	600	550	500	500	500	500	500
Speed — Revolutions per minute of shaker shaft	600	600	600	600	600	550	550	550	550	550	550
Size of driving pulley	6" x 4"	7" x 5"	7" x 5"	8" x 5"	10" x 5"	12" x 5"	12" x 6"	14" x 6"	14" x 6"	16" x 7"	16" x 7"
Capacity Pounds, per hour — As a rough rice cleaner	1600 to 2000	2400 to 3000	3600 to 4500	4600 to 5750	5600 to 7000	7400 to 9350	8800 to 11000	11400 to 14300	12500 to 15500	18350 to 22950	20050 to 25050
Capacity Pounds, per hour — As a hulled rice cleaner	1200 to 1600	1800 to 2400	2700 to 3600	3450 to 4600	4200 to 5600	5600 to 7400	6600 to 8800	8600 to 11400	9300 to 12500	13750 to 18350	15050 to 20050
Horse power required to operate	¾	1	1½	2	3	3½	4½	5½	6½	7½	8
Approximate cubic feet crated for export	115	130	185	270	330	350	420	445	610	720	780
Net weight of machine, pounds	815	910	930	1580	1790	1970	2210	2340	2530	3410	4100
Approximate gross weight, crated for export, pounds	1200	1380	1555	2190	2725	2980	3860	3890	4240	5650	6340

For prices see current price book.

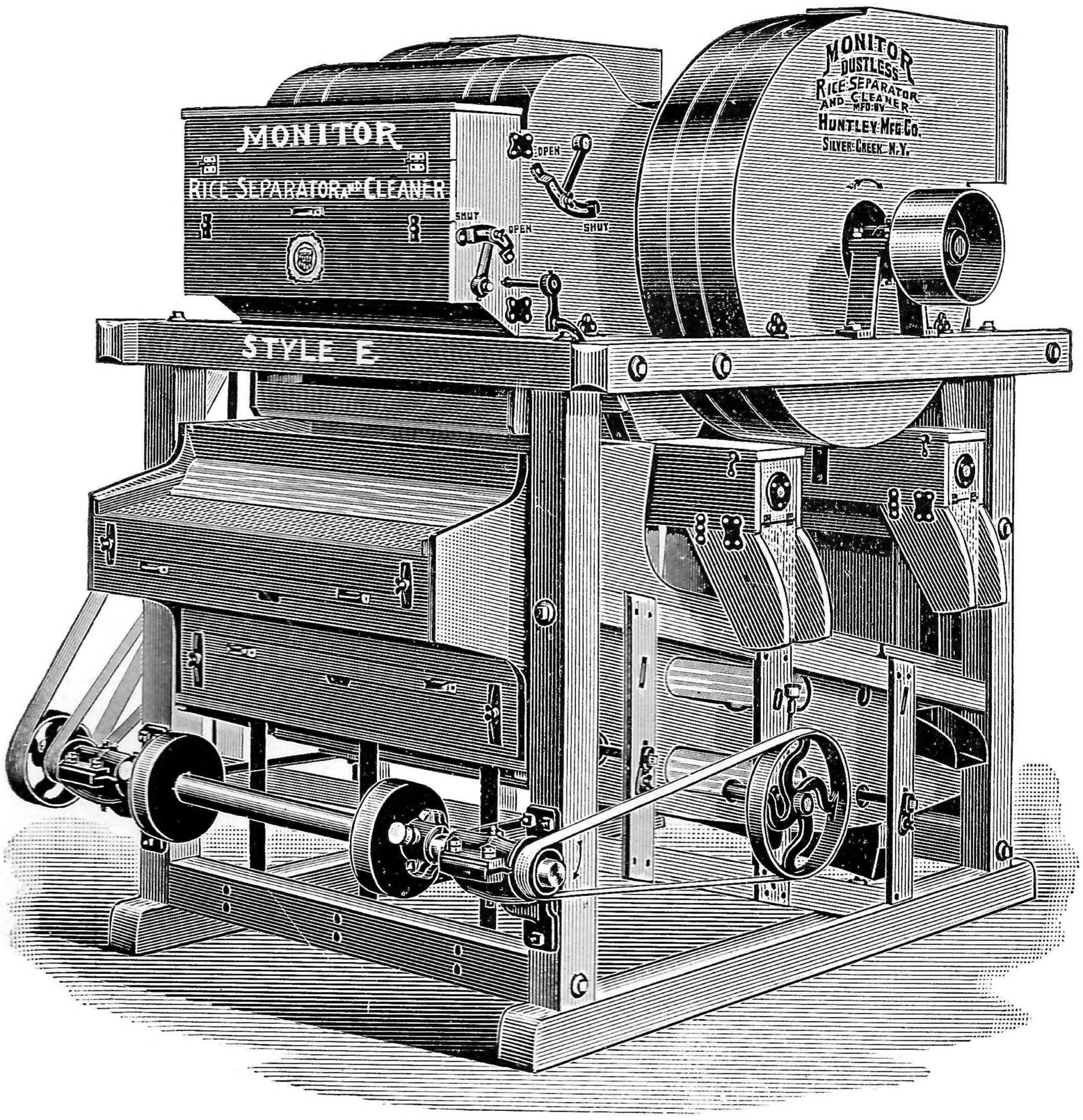
*Each machine is clothed with one set of screens. If machine is to be used for both rough rice and hulled rice cleaning, extra screens are required, for which an extra charge is made.

Automatic Disc Oiling Eccentrics (illustrated page 19) can be attached to this machine when desired, at extra price.

Ball bearings (page 17) supplied on request, at additional price.

SIZE OF FAN OUTLETS—INSIDE MEASURE

SIZE NO.	0	1	2	3	4	5	6	7	8	9	10
Fan opening, depth	8½"	9"	11½"	12½"	13½"	14½"	15½"	16¼"	16¼"	19¼"	19¼"
Fan opening, width	5"	6"	7"	8"	9"	10"	10½"	11"	12¼"	12¼"	12¼"
Total square inches for both fan outlets	85	108	162	200	244	290	326	358	398	472	472



MONITOR RICE SEPARATOR AND CLEANER

STYLE "E"

A Rice Cleaner—a Rice Chaffer, uniformly perfect work whether used for first cleaning on unhulled rice or for the closer gauged separations necessary in the final cleaning of hulled rice—unquestionably this is the only machine capable of successfully performing this wide range of cleaning. With every operating part easily accessible, precisely adjustable and under positive control, the operator obtains separations gauged to accurate standards. A light running cleaner, simple to operate, and possessing splendid endurance powers; heavy, refined, durable construction—a true specimen of high grade machinery.

Five cleaning operations; two sensitively accurate air separations are performed—impurities, chaff and dust, lighter in weight than rice, are removed without a sacrifice of good rice—for efficiency and economy the air work of this machine is without an equal. Three different screen separations; all impurities larger in size, also sand, foul seeds, dirt, etc., smaller in size than the rice being treated, are removed.*

CONSTRUCTION—EQUIPMENT

Shaker carrying screens is one-piece type, counterbalanced in motion by counterweight fly wheels placed on shaker shaft——Automatic traveling brush sieve cleaners clean the fine seed screen, compression oilers for main bearings of this attachment——Screens are interchangeable, easily removable. Screen frames are exceptionally heavy construction, accurately sized (built to templet), clothed with heavy metal——Fan and shaker shafts are uncommonly heavy, of best quality steel, machine sized, and——these operate in heavy-duty, self-oiling bearings, illustrated on page 17. (Regular, chain or ring oilers; at extra price, self-aligning ball bearings)——Shaking motion imparted to shoe by two eccentrics, adjustable, dust-proof, self-oiling design, illustrated page 18——Feed hopper on the smaller sizes has adjustable feed gate and vibrating force feeder, adjustable slide gate and revolving force feeder on the larger machines——A novel spreading device feeds rice evenly across full surface of screens——Fans are one-piece type—see page 16, Patent Air Equalizing Regulators.

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*Read carefully pages 4 and 5.

MONITOR RICE SEPARATOR AND CLEANER

STYLE "C"

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	1	2	3	4	5	6	7	8	9	10	11
Extreme height	5' 10"	6' 6"	6' 8"	7' 1"	7' 7"	7' 10"	8' 5"	8' 5"	9' 2"	9' 2"	9' 2"
Extreme length	5' 3"	6' 1"	6' 6"	6' 11"	7' 4"	8' 0"	8' 8"	8' 8"	10' 3"	10' 3"	10' 3"
Extreme width	4' 6"	5' 2"	5' 8"	6' 5"	6' 7"	7' 5"	7' 9"	8' 6"	9' 8"	10 ' 2"	10' 8"
Length on floor	4' 8"	5' 5"	5' 9"	6' 1"	6' 6"	7' 1"	8' 0"	8' 0"	9' 3"	9' 3"	9' 3"
Width on floor	3' 3"	3' 10"	4' 4"	4' 11"	5' 5"	5' 10"	6' 4"	6' 11"	7' 11"	8' 5"	8' 11"
Height to where rice enters	5' 6"	5' 10"	6' 0"	6' 4"	6' 10"	7' 1"	8' 3"	8' 3"	8' 10"	8' 10"	8' 10"
Height to center of drive pulley (fan shaft)	4' 6"	5' 0"	5' 1"	5' 5"	5' 8"	5' 11"	6' 5"	6' 5"	6' 9"	6' 9"	6' 9"
Height to center of shaker shaft	2' 2"	2' 3"	2' 5"	2' 8"	2' 8"	2' 10"	3' 2"	3' 2"	2' 10"	2' 10"	2' 10"
Speed — Revolutions per minute of fan (driving) shaft	600	600	600	600	550	500	500	500	500	500	500
Speed — Revolutions per minute of shaker shaft	600	600	600	600	550	550	550	550	550	550	550
Size of driving pulley	7" x 5"	7" x 5"	8" x 5"	10" x 5"	12" x 5"	12" x 6"	14" x 6"	14" x 7"	16" x 7"	16" x 7"	16" x 7"
Capacity Pounds, per hour — As a rough rough rice cleaner	2400 to 3000	3600 to 4500	4600 to 5750	5600 to 7000	7400 to 9350	8800 to 11000	11400 to 14300	12500 to 15500	18350 to 22950	20050 to 25050	21800 to 27250
Capacity Pounds, per hour — As a hulled rice cleaner	1800 to 2400	2700 to 3600	3450 to 4600	4200 to 5600	5600 to 7400	6600 to 8800	8600 to 11400	9300 to 12500	13750 to 18350	15050 to 20050	16350 to 21800
Horse power required to operate	1	1½	2	3	3½	4½	5½	6½	7½	8	9
Approximate cubic feet crated for export	150	190	270	330	350	425	440	610	725	790	900
Net weight of machine, pounds	1075	1260	1570	1840	2040	2250	2440	2660	3700	4480	5200
Approximate gross weight, crated for export, pounds	1500	1880	2365	2840	3065	3950	3990	4310	6180	6830	7570

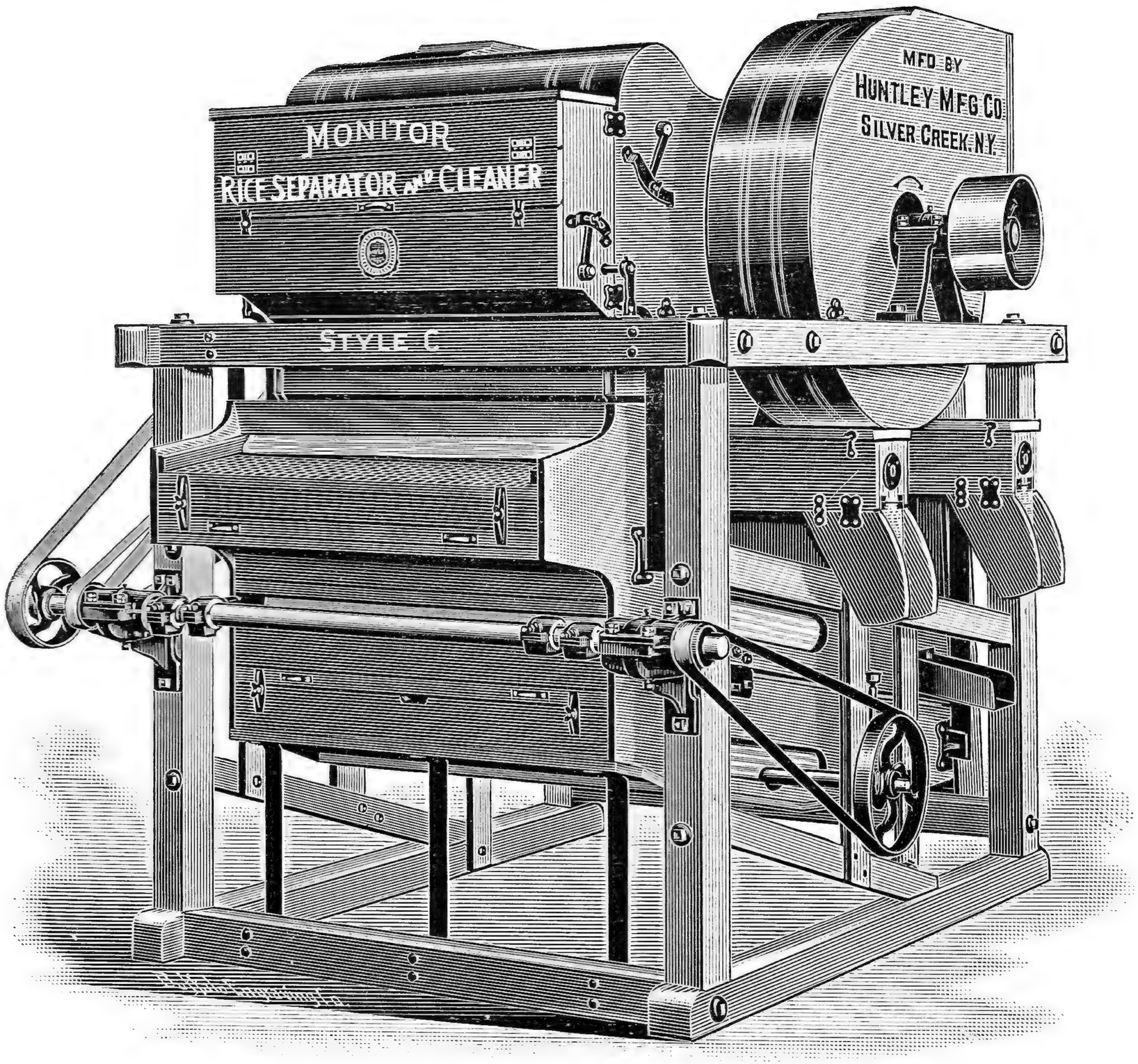
For prices see current price book.

*Each machine is clothed with one set of screens. If machine is to be used for both rough rice and hulled rice cleaning, extra screens are required for which an extra charge is made. "Monitor" Automatic Disc Oiling Eccentrics (illustrated page 19) can be attached to this machine when desired, at extra price.

Ball bearings (page 17), supplied on request at additional price.

SIZE OF FAN OUTLETS—INSIDE MEASURE

SIZE NO.	1	2	3	4	5	6	7	8	9	10	11
Fan opening, depth	9"	11½"	12½"	13½"	14½"	15½"	16¼"	16¼"	19¼"	19¼"	19¼"
Fan opening, width	6"	7"	8"	9"	10"	10½"	11"	12¼"	12¼"	12¼"	12¼"
Total square inches for both fan outlets	108	162	200	244	290	326	358	398	472	472	472



MONITOR RICE SEPARATOR AND CLEANER

STYLE "C"

IDENTICAL in design and construction, and the same in operation as our Style "E" "Monitor", illustrated on page 7, except as follows: Style "E" has a "single" or one-piece shaker, while this Style "C" shown above has two. The two shaking shoes are suspended one above the other, shaking motion is imparted from one large eccentric shaft; by compounding the drive in this manner (the two shoes operate in exactly opposite directions) the smoothest known "reciprocating" or "counterbalanced" shaking motion is obtained. Compared to the Style "E" "Monitor" the above machine has smoother running qualities, and we recommend its use particularly in the larger sizes.

Operating under extremely light power this machine handles either rough rice cleaning or rice chaffing with remarkable ease, performing two air and three screen separations*, as explained for the Style "E".

CONSTRUCTION—EQUIPMENT

The same as detailed for our Style "E" on page 7, with this exception: The above machine having our perfected, compound drive, two shaking shoes are used and four self-oiling eccentrics (illustrated page 18) are employed instead of two, as for the Style "E".

*Read carefully pages 4 and 5.

MONITOR AUTOMATIC RICE SEPARATOR AND CLEANER

STYLE "B"

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Extreme height	5' 10"	6' 6"	6' 8"	7' 1"	7' 7"	7' 10"	8' 5"	8' 5"	9' 2"	9' 2"	9' 2"	9' 2"	9' 5"	9' 2"	9' 2"
Extreme length	5' 4"	6' 2"	6' 6"	7' 0"	7' 5"	8' 0"	8' 11"	8' 11"	10' 5"	10' 5"	10' 5"	10' 5"	10' 5"	10' 5"	10' 5"
Extreme width	4' 6"	5' 2"	5' 8"	6' 5"	6' 11"	7' 5"	7' 9"	8' 6"	9' 8"	10' 2"	10' 8"	11' 5"	12' 2"	12' 10"	13' 6"
Length on floor	4' 8"	5' 5"	5' 9"	6' 2"	6' 6"	7' 1"	8' 0"	8' 0"	9' 3"	9' 3"	9' 3"	9' 1"	9' 1"	9' 1"	9' 1"
Width on floor	3' 3"	3' 10"	4' 4"	4' 11"	5' 5"	5' 10"	6' 4"	6' 11"	7' 11"	8' 5"	8' 11"	9' 5"	9' 11"	10' 5"	10' 11"
Height to where rice enters	5' 6"	5' 10"	6' 0"	6' 4"	6' 10"	7' 1"	8' 3"	8' 3"	8' 10"	8' 10"	8' 10"	9' 2"	9' 5"	8' 5"	8' 5"
Height to center of drive pulley (fan shaft)	4' 6"	5' 0"	5' 1"	5' 5"	5' 8"	5' 11"	6' 5"	6' 5"	6' 9"	6' 9"	6' 9"	6' 9"	6' 9"	6' 9"	6' 9"
Height to center of shaker shaft	2' 2"	2' 3"	2' 5"	2' 8"	2' 8"	2' 10"	3' 2"	3' 2"	2' 10"	2' 10"	2' 10"	2' 7"	2' 7"	2' 7"	2' 7"
Speed — Revolutions per minute of fan (driving) shaft	600	600	600	600	550	500	500	500	500	500	500	575	600	500	500
Speed — Revolutions per minute of shaker shaft	600	600	600	600	550	550	550	550	550	550	550	500	500	500	500
Size of driving pulley	7" x 5"	7" x 5"	8" x 5"	10" x 5"	12" x 5"	12" x 6"	14" x 6"	14" x 7"	16" x 7"	16" x 7"	16" x 7"	16" x 8"	16" x 8"	18" x 8"	18" x 8"
Capacity Pounds, per hour — As a rough rice cleaner	2400 to 3000	3600 to 4500	4600 to 5750	5600 to 7000	7400 to 9350	8800 to 11000	11400 to 14300	12500 to 15500	18350 to 22950	20050 to 25050	21800 to 27250	23544 to 29975	25627 to 31972	27245 to 35169	29424 to 38685
Capacity Pounds, per hour — As a hulled rice cleaner	1800 to 2400	2700 to 3600	3450 to 4600	4200 to 5600	5600 to 7400	6600 to 8800	8600 to 11400	9300 to 12500	13750 to 18350	15050 to 20050	16350 to 21800	17985 to 23980	19783 to 26378	21761 to 29015	23937 to 31916
Horse power required to operate	1	1½	2	3	3½	4½	5½	6½	7½	8	9	10	11	12	13
Approximate cubic feet crated for export	190	220	260	340	360	450	460	620	730	790	900	1000	1050	1100	1142
Net Weight of machine, pounds	930	1470	1565	2100	2620	2920	3300	3660	4080	4500	5400	6000	6500	7000	7695
Approximate gross weight, crated for export, pounds	1500	2010	2530	3040	3510	4100	4280	4710	6790	6900	7600	8400	9200	10100	11970

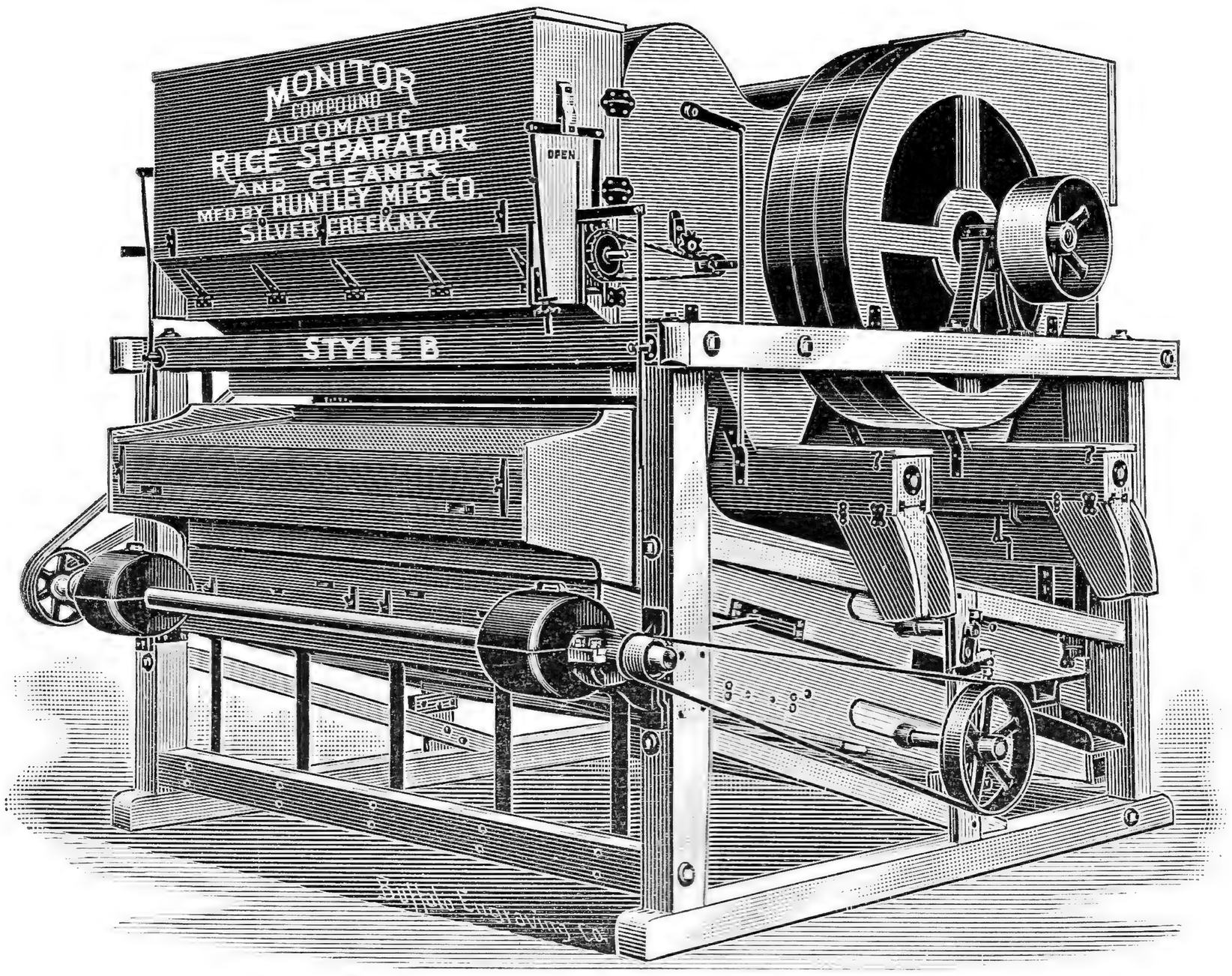
For prices see current price book.

*Each machine is clothed with one set of screens. If machine is to be used for both rough rice and hulled rice cleaning, extra screens are required for which an extra charge is made.

Ball bearings (page 17), supplied on request at additional price.

SIZE OF FAN OUTLETS—INSIDE MEASURE

SIZE NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Fan opening, depth	9"	11½"	12½"	13½"	14½"	15½"	16¼"	16¼"	19¼"	19¼"	19¼"	19¼"	19¼"	19¼"	19¼"
Fan opening, width	6"	7"	8"	9"	10"	10½"	11"	12¼"	12¼"	12¼"	12¼"	13¼"	14¼"	15¼"	16½"
Total square inches for both fan outlets	108	157	200	244	290	326	358	398	472	472	472	510	548	586	634



MONITOR AUTOMATIC RICE SEPARATOR AND CLEANER

STYLE "B"

THE cleaner incomparable—a machine which has established many new standards for close calculated cleaning work, and today ranks first as a close-action, non-wasteful cleaner. Its separations are easily gauged to any range of work and are simply maintained with automatic regularity—unfailingly accurate since they are entirely mechanical. A perfect rough rice cleaner—equally as efficient as a cleaner or a chaffer of hulled rice. Air work is exactly the same as with Styles "E" and "C" (pages 7 and 9), two sensitively controlled separations remove everything lighter in weight than the rice; screen separations are the same in number, three; coarse trash, all impurities, larger and foul seeds and fine dirt smaller in size than rice are removed, yet with this Style "B" closer separations are obtained, as automatic cleaners operate under the entire surface of the two principal screens. Automatic disc-oiler eccentrics (illustrated page 19) drive the two counterbalanced shaker shoes—the world's most perfect driving mechanism for a cleaner—our patent. This is the heaviest built, finest fitted, lightest running and smoothest action rice cleaner of today. Accessibility, ease of regulation, durability and low cost for operating are features.

CONSTRUCTION—EQUIPMENT

Two shaking shoes carry the screens; these shoes have our perfected, compound (counterbalanced) drive———Automatic traveling brush sieve cleaners clean the fine seed and the main cleaning screens—the main bearings for these attachments have compression oilers———Easily removable, all screens are interchangeable. Screen frames are extremely heavy construction, accurately sized (built to templet), and clothed with heavy metal——— shaker and fan shafts are uncommonly heavy, of best quality steel, machine sized, and each operates in heavy-duty, self-oiling bearings, illustrated page 17, (regular, chain or ring oilers; at extra price, self-aligning ball bearings)———Shaking motion to shoes is from four massive eccentrics, our automatic, disc-oiler drive (patented) illustrated on page 19——— For the smaller sizes feed hopper is equipped with adjustable feed gate and vibrating feeder; on the larger machines, adjustable slide gate and revolving force feeder—A non-clogging spreading device feeds rice uniformly over full screen surface———Fans, low-speed, one-piece type which operate in conjunction with "Monitor" Patent Air Equalizing Regulators, see page 16———For further details of construction see page 4. "Operation" described on page 5.

MONITOR AUTOMATIC RICE SEPARATOR AND CLEANER

STYLE "A"

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	1	2	3	4	5	6	7	8	9	10	11
Extreme height	7' 0"	7' 0"	7' 0"	8' 8"	8' 9"	8' 9"	8' 10"	8' 10"	8' 10"	8' 10"	8' 10"
Extreme length	7' 0"	7' 0"	7' 0"	8' 10"	8' 10"	8' 10"	8' 10"	8' 10"	8' 10"	8' 10"	8' 10"
Extreme width	5' 0"	5' 4"	5' 10"	6' 10"	7' 5"	8' 3"	8' 9"	9' 1"	9' 7"	10' 2"	10' 8"
Length on floor	6' 4"	6' 4"	6' 4"	7' 10"	7' 10"	7' 10"	7' 10"	7' 10"	7' 10"	7' 10"	7' 10"
Width on floor	3' 10"	4' 2"	4' 6"	5' 5"	5' 11"	6' 5"	6' 11"	7' 5"	7' 11"	8' 5"	8' 11"
Height to where rice enters	6' 6"	6' 6"	6' 6"	7' 4"	7' 9"	8' 3"	8' 3"	8' 3"	8' 7"	8' 7"	8' 7"
Height to center of drive pulley (fan shaft)	5' 6"	5' 6"	5' 6"	6' 9"	6' 9"	6' 9"	6' 9"	6' 9"	6' 9"	6' 9"	6' 9"
Height to center of shaker shaft	2' 10"	2' 10"	2' 10"	3' 5"	3' 5"	3' 5"	3' 5"	3' 5"	3' 5"	3' 5"	3' 5"
Speed — Revolutions per minute of fan (driving) shaft	550	550	550	550	500	500	500	500	500	500	500
Speed — Revolutions per minute of shaker shaft	500	500	500	500	500	500	500	500	500	500	500
Size of driving pulley	9" x 4½"	9" x 4½"	9" x 4½"	10" x 5½"	12" x 5½"	12" x 6½"	14" x 6½"	14" x 7½"	16" x 7½"	16" x 8½"	16" x 8½"
Capacity Pounds, per hour — As a rough rice cleaner	2650 to 7400	3050 to 8450	3500 to 9600	4150 to 11400	4800 to 13150	5450 to 15000	6150 to 16900	6850 to 18850	7500 to 20650	8200 to 22550	8850 to 24350
Capacity Pounds, per hour — As a hulled rice cleaner	2000 to 6050	2300 to 6900	2600 to 7850	3100 to 9350	3600 to 10750	4100 to 12300	4600 to 13850	5150 to 15400	5650 to 16900	6150 to 18450	6650 to 19900
Horse power required to operate	1	1½	2	3	3½	4½	5½	6½	7½	8	9
Approximate cubic feet crated for export	395	415	470	500	520	530	580	630	740	800	910
Net weight of machine, pounds	2000	2190	2520	2770	2990	3210	3470	3910	4300	4800	5700
Approximate gross weight, crated for export, pounds	3290	3660	3900	4305	4520	4735	4980	5370	6980	7400	7900

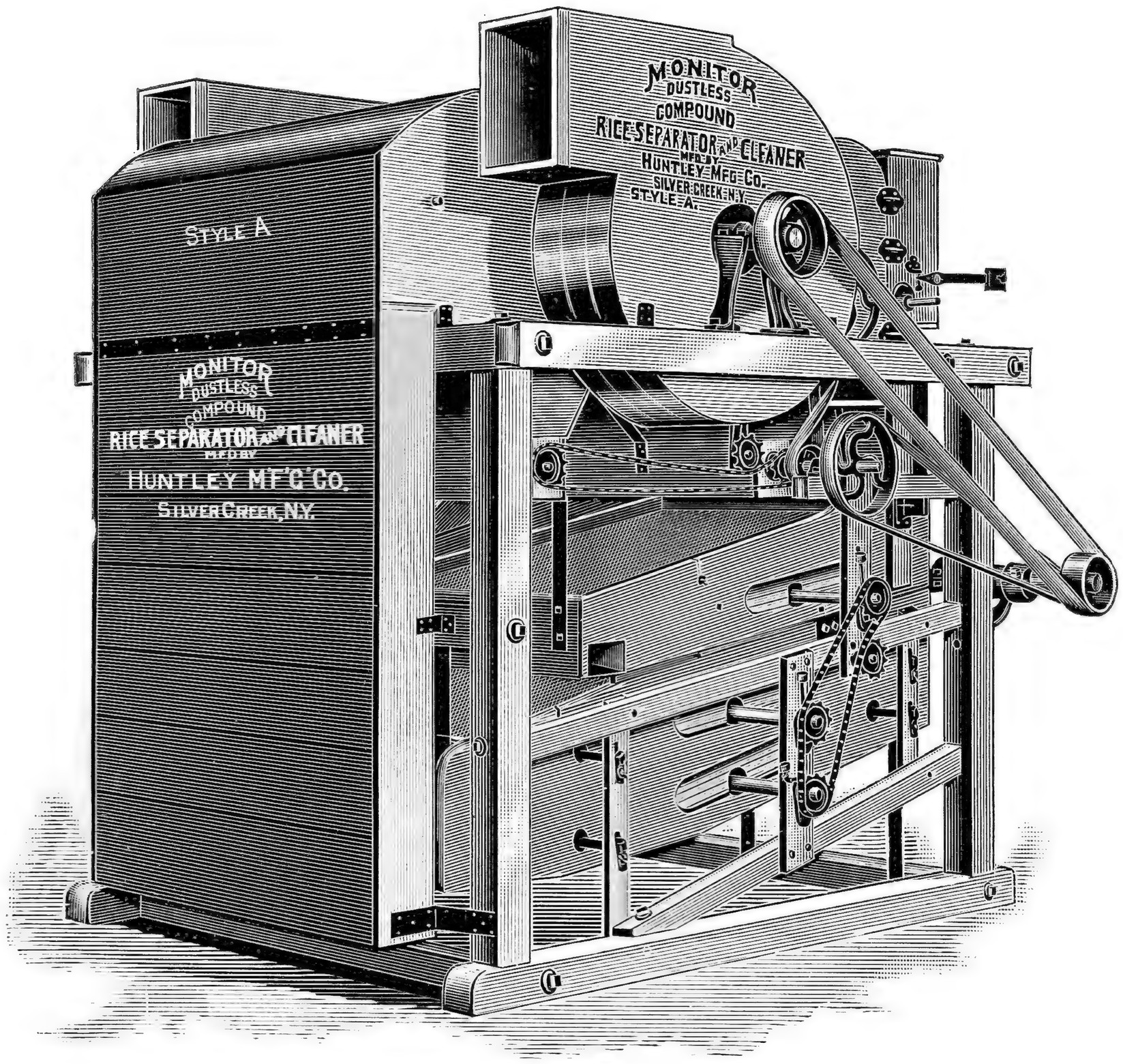
For prices see current price book.

*Each machine is clothed with one set of screens. If machine is to be used for both rough rice and hulled rice cleaning, extra screens are required, for which an extra charge is made.

Ball bearings (page 17) supplied on request at additional price.

SIZE OF FAN OUTLETS—INSIDE MEASURE

SIZE NO.	1	2	3	4	5	6	7	8	9	10	11
Fan opening, depth	11½"	11½"	11½"	14½"	15½"	15½"	16¼"	16¼"	16¼"	16¼"	16¼"
Fan opening, width	7"	7"	8"	10"	10½"	10½"	11"	12¼"	12¼"	12¼"	12¼"
Total square inches for both fan outlets	161	161	184	290	326	326	358	398	398	398	398



MONITOR AUTOMATIC RICE SEPARATOR AND CLEANER

STYLE "A"

A cleaner, a semi-grader, a reclaimer—a machine specially capable for handling excessively dirty rice, in any state, mixtures, off-grade lots or damaged rice. Shippers desiring to run their fancy rice to separate grades; dealers or millers seeking to reclaim good rice from poor or damaged lots; millers who demand extraordinarily fine cleaning at the head of their mill—to such this machine proves itself a splendid investment.

Embodying all the good features of the Style "B" "Monitor", page 11, the above machine differs in this respect: An extra run of screens is carried, thus four individual screen separations are obtained instead of three as with Style "B". This extra screen (known as the auxiliary) is placed between the rougher and the main cleaning screens—it is equipped with automatic traveling brush sieve cleaners (as are also the main cleaning and the seed screens). Used upon exceedingly dirty rice, or badly mixed lots, this screen is engaged to assist the work of the rougher and main cleaning screens. Impurities which would ordinarily escape the rougher operation are taken off by the auxiliary and consequently the rice goes to the main cleaning screen prepared for much closer cleaning work than is possible without the use of the auxiliary. Again the auxiliary may be clothed as a grader, or the main cleaning screen as a grader and the auxiliary as a cleaner; many combinations of screen dress are possible. The operator soon becomes skilled in the manipulation of flow changes and screen dress—he finds no difficulty in performing work with this one machine which otherwise requires two separate cleaners, moreover there is an evenness and uniformity to this "Monitor" Separator no other machine gives. Air work exactly the same as Styles "B", "C" and "E"—two sensitively controlled air separations.

CONSTRUCTION—EQUIPMENT

The same as described for Style "B" "Monitor", page 11; these two machines being identical except this Style "A" has auxiliary screens (and automatic traveling brush outfit for same), as described above. "Advantageous Features," page 4.

MONITOR RICE CLASSIFIER AND CLEANER

DIMENSIONS, CAPACITIES, ETC.

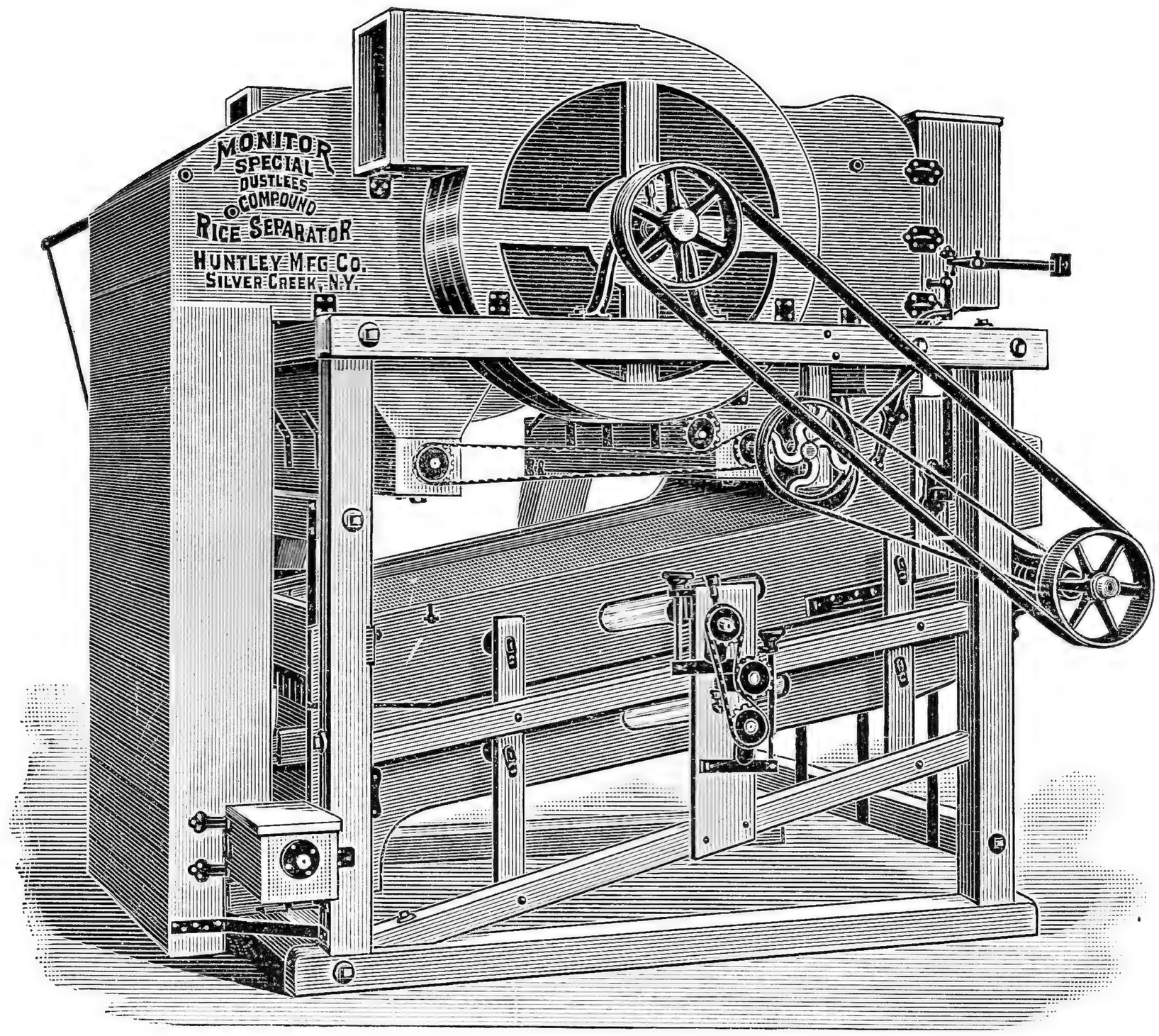
SIZE NO.	6	7	8	9	10	11
Extreme height	9' 1"	9' 2"	9' 2"	9' 2"	9' 2"	9' 2"
Extreme length	9' 8"	9' 8"	9' 8"	9' 8"	9' 8"	9' 8"
Extreme width	7' 5"	8' 3"	8' 10"	9' 10"	10' 4"	10' 10"
Length on floor	7' 9"	7' 9"	7' 9"	7' 9"	7' 9"	7' 9"
Width on floor	5' 9"	6' 3"	6' 11"	7' 11"	8' 5"	8' 11"
Height to where rice enters	8' 8"	8' 8"	8' 8"	9' 0"	9' 0"	9' 0"
Height to center of drive pulley (fan shaft)	7' 2"	7' 2"	7' 2"	7' 2"	7' 2"	7' 2"
Height to center of shaker shaft	3' 8"	3' 8"	3' 8"	3' 8"	3' 8"	3' 8"
Speed — Revolutions per minute of fan (driving) shaft	550	550	550	550	550	550
Speed — Revolutions per minute of shaker shaft	550	550	550	550	550	550
Size of driving pulley	12" x 6"	14" x 6"	14" x 7"	16" x 7"	16" x 7"	16" x 7"
Capacity, pounds per hour	4300 to 5700	5600 to 7400	7500 to 10000	9000 to 12000	9750 to 13000	10500 to 14000
Approximate horse power required to operate	5	5¾	6¾	8	9	10
Approximate cubic feet crated for export	460	490	640	750	810	920
Net weight of machine, pounds	2900	3300	3700	4100	4600	5400
Approximate gross weight crated for export, pounds	4100	4300	4800	6800	7000	7600

For prices see current price book.

Each machine is clothed with one set of screens. Where special work is wanted and additional screens are required an extra charge is made. Ball bearings (page 17) supplied at additional price—when desired.

SIZE OF FAN OUTLETS—INSIDE MEASURE

SIZE NO.	6	7	8	9	10	11
Fan opening, depth	15½"	16¼"	16¼"	16¼"	16¼"	16¼"
Fan opening, width	10½"	11"	12¼"	12¼"	12¼"	12¼"
Total square inches for both fan outlets	326	358	398	398	398	398



MONITOR RICE CLASSIFIER AND CLEANER

THE practical miller understands that the best results, either in hulling, shelling or polishing, are obtained where large and small rice are treated separately; by sorting the large from the small closer regulation and better results are obtained on the huller, sheller or polisher, with a big reduction in breakage and waste. This machine produces two sizes of stock, and also performs two separate air cleanings on both the large and small rice. Any desired standard of size is easily obtained by changing screens, and once established the two grades are maintained with perfect uniformity. Rice is first treated to a sensitively controlled air cleaning, thence passes to a screen which removes all coarse impurities, and next to the extraordinarily large area screens where grading is performed. Each grade, the small and the large rice, discharge separately from machine through deep suction legs; this second air cleaning, like the first, is sensitively controlled. Enormous screen surface (automatic sieve cleaners to insure full capacity with the finest of screens); rare evenness of grading; free manipulation and close regulation; light power; big capacity; simplified operation and splendid durability are distinguishing features of this machine.

CONSTRUCTION—EQUIPMENT

Two shaking shoes carry the screens, these have our improved compound (counterbalanced) drive——Automatic traveling brushes clean the grading screens—main bearings of this outfit have compression oilers——All screens are interchangeable, easily removable. Screen frames are very durable construction, accurately sized (built to templet), and are clothed with heavy metal——Shaker and fan shafts are unusually heavy, machine sized, of best quality steel, and both operate in heavy-duty, self-oiling bearings, illustrated page 17, (regular, ring or chain oilers; at extra price, self-aligning ball bearings)——Shakers driven by four large eccentrics, adjustable, dust-proof, self-oiling type, illustrated page 18 ——On larger sizes feed hopper has adjustable slide gate and revolving force feeder, smaller machines, adjustable weighted gate and vibrating feeder —— Low speed, one-piece, fans operate in conjunction with "Monitor" Compensating Air Regulators — our patent, see page 16——Further details of construction, see "Monitor Construction," page 4.

MONITOR COMPENSATING AIR REGULATORS

The only internal air equalizing regulators used in the manufacture of rice cleaning machinery.

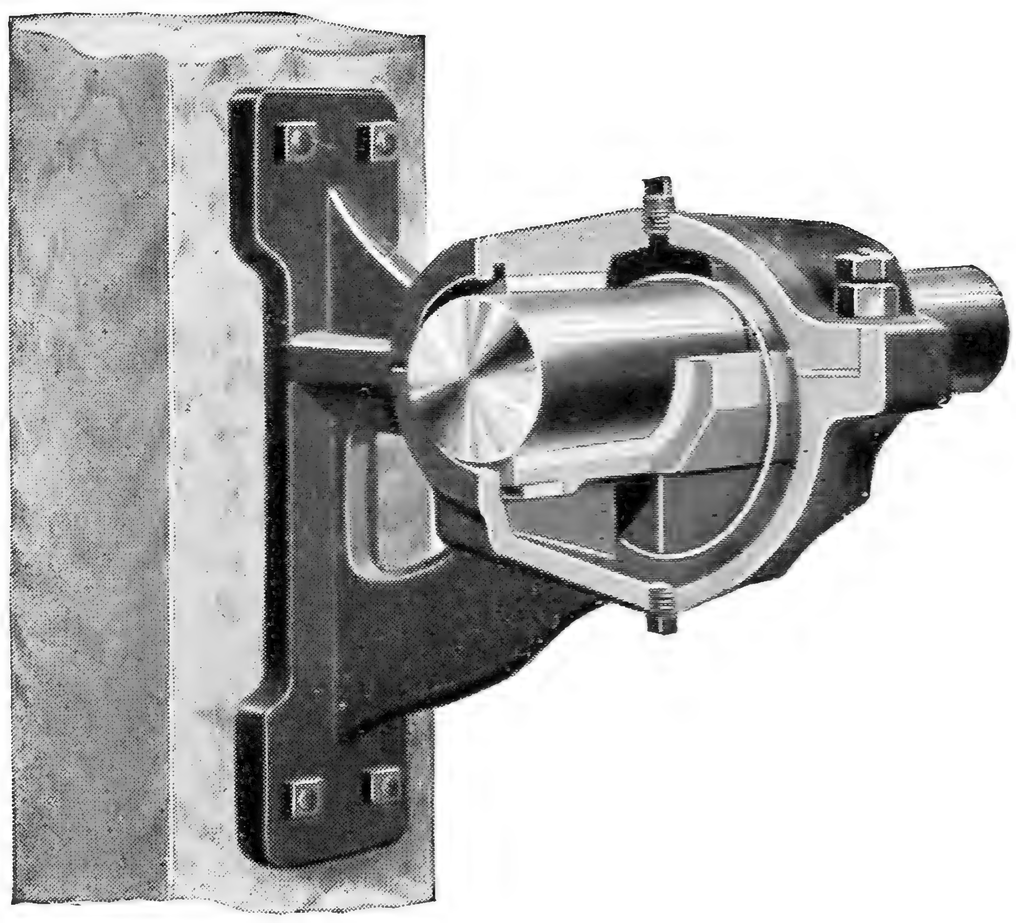
AIR currents are equalized by the use of this patented device—uniform fan suction across the entire width of the suction legs, is developed and maintained under all conditions.

The phenomenal accuracy of "Monitor" Air Separations is a thing unknown to any other rice cleaning machine. On actual test a "Monitor" delivers perfect air separations when operating on the lightest of seeds (weighing as little as 12 pounds to the bushel). This extraordinary work of a "Monitor" when applied to rice cleaning enables the user to make truer separations with a perceptible saving in shrinkage loss over other cleaners.

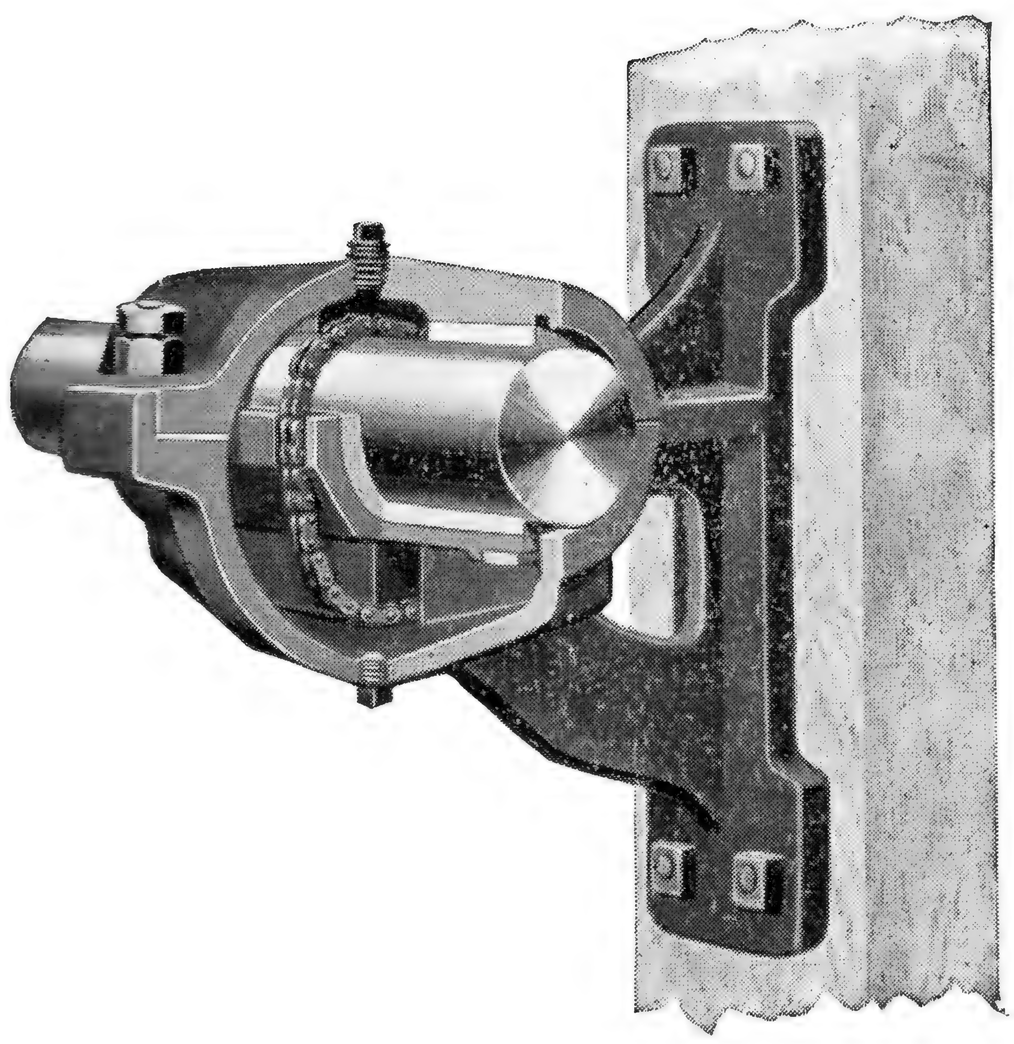
"Monitor" Cleaners have two low-speed fans with wide air expansion chamber directly between same. The expansion chamber is extended lengthwise across top of machine, and has a wide suction leg attached to each end (namely, first and second suctions). Both suction legs are the full width of the air expansion chamber. Situated between the eyes of the two fans and extending across full width of air expansion chamber are two rows of adjustable sliding valves so placed that each set operates independently on the first and second air separations. These valves, *fully protected by our broad patents*, are employed to equalize the air currents; in other words, to provide uniform fan suction lifting strength across every fractional part of the two suction legs.

The air currents, drawn up through the two suction legs to the fans, pass over the two rows of adjusting valves—these are manipulated at will. For the entire space, from eye to eye of fans (width of both suction legs), absolutely uniform velocity is maintained—there are no "dead spots" where rice will miss cleaning, no "over strong spots" where good rice will be drawn off and lost in the screenings.

Valves, slides and doors are located at various points, these being used to increase or decrease the volume of air passing through the suction legs and settlings chambers. These are easily accessible and enable the operator to control at all times the aspirations required for any class of work. Unscrupulous manufacturers frequently attempt to confuse intending purchasers by misleading statements concerning similar valves, slides, doors and their use. It should be borne in mind that *internal air equalizing valves are found on the "Monitor" only*—our patents prohibiting their use on any other cleaner.



A "Monitor" self-oiling bearing—ring oiler type. Cut is sectional view showing oiling ring, large oil reservoir through which it travels, also the heavily babbitted bearing surface (which in length, in all cases, is at least three times the shaft diameter).



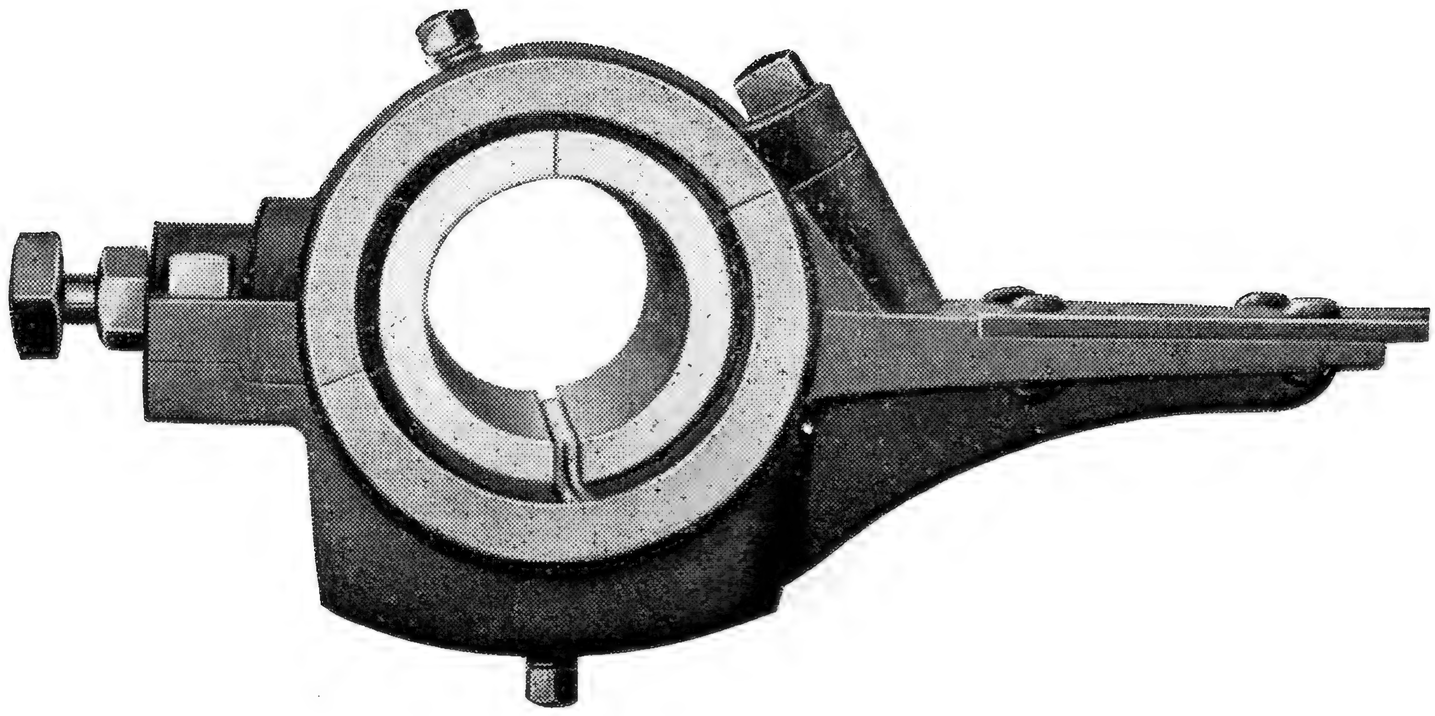
Sectional view of a "Monitor" self-oiling bearing—chain oiler type. Observe that flexible chain is used in place of a ring — otherwise these two bearings are the same. Note the threaded plugs for draining oil reservoir and replenishing—on both styles of these bearings.



The first rice cleaner ball bearing *that is self-aligning in every sense of the word.* The retainers which hold the balls are mounted in a massive, one-piece, yoke bearing which is positively self-aligning. Balls are encased with dust proof cap plate. Observe the extraordinarily heavy lines of this bearing—a ball bearing fitted for severe, continuous service.

MONITOR SELF-OILING BEARINGS

BOTH in design and construction, numerous details of perfection distinguish these different styles of separator bearings. In designing them we adopted the most advanced ideas of our best engineers, and also incorporated features forty-five years of experience have taught us are essential. No manufacturer is supplying heavier bearings than our "Monitor" Separators are equipped with—few, if any, as heavy. The castings are especially heavy, high grade gray iron. Accurate machine work and fitting—and rigid inspection produce our perfect bearings. Lubrication is at the choice of the purchaser. Having had splendid results with our deep reservoir ring oiling bearings, we recommend this type and supply it unless otherwise ordered. For those who prefer chain oilers or ball bearings, we supply those types—the latter at an advanced price.



MONITOR SELF-OILING ECCENTRICS

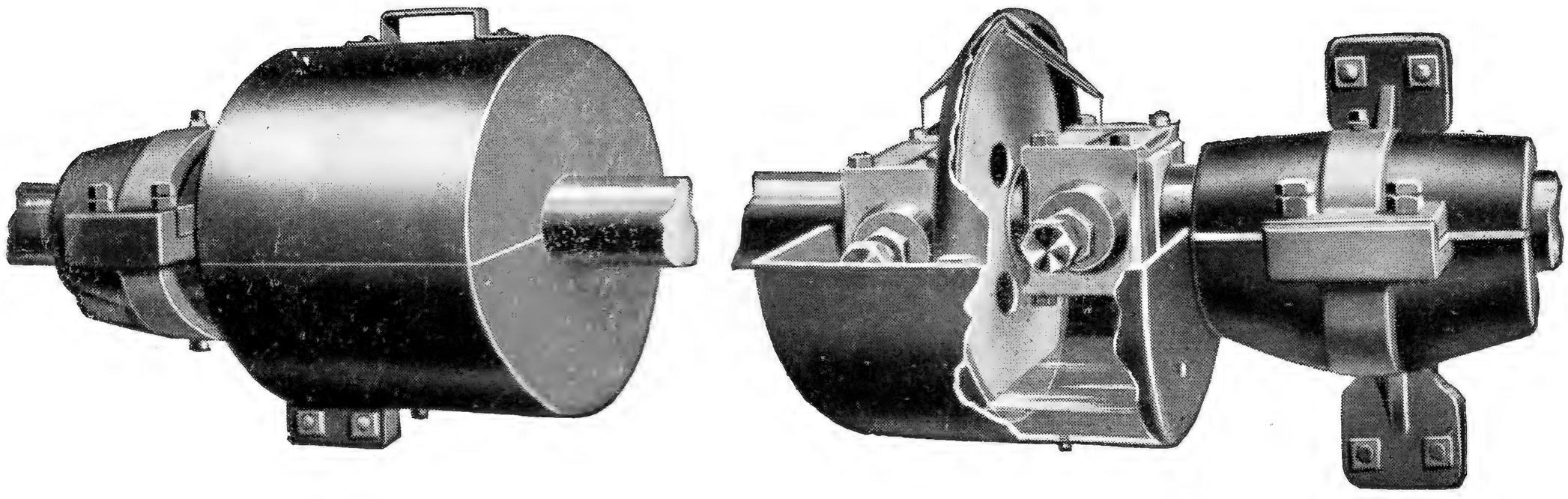
CAPILLARY TYPE

ECCENTRICS--those parts of the cleaning machine which are forced to endure constant, hard service of an important character—important inasmuch as they create and control the work performed by the screens. Nothing less than practical design, carefully selected materials, refined workmanship, perfect fit and adjustment will produce a serviceable eccentric—nothing less than abundant lubrication will permit it to operate properly and insure lasting wearing qualities. In designing the self-oiling eccentric illustrated above we aimed and were successful in producing that which would render perfect service with the least amount of care and attention.

Illustration shows the generally heavy construction of this self oiler. The adjustments are simple and positive. Locked nuts and large adjusting screws are provided. The brass bushings are heavier than ordinarily used. Underneath is a reservoir carrying supply of oil. A heavy wick, doubled and set in position between the two-piece brass bushing, feeds the oil from the reservoir directly to the shaft. The wick serves as a filter—any particles of sand or grit which might otherwise reach the reservoir will lodge at the lower end of the wick, only the oil will travel through the wick, consequently there is no cutting nor injury from this source as frequently occurs with the old, standard type eccentrics. The operator is required to oil these parts less frequently, as the oil supply carried in the reservoir is ample for a considerable period of time.

See cut, and note the feed and drain plugs for replenishing and draining oil from reservoir. Comparison will prove we have followed more refined mechanical lines and provided generally heavier construction than with other wick oiling eccentrics.

Although this is undoubtedly the superior of all modern wick type, self-oiling eccentrics, we invite your careful attention to our exclusive, patented Automatic Disc Oiling Eccentrics, illustrated and described on opposite page.



MONITOR AUTOMATIC DISC OILING ECCENTRICS

The first mechanical oiler, the original centrifugal action oiler for rice cleaner eccentrics—protected by our patents.

IMPROVES eccentric service beyond compare, protects the user against risk from fire, against wear, care and expense—an outfit wonderfully simple, of which many users say "ten times more oiling with one-tenth as much oil."

Opposite page carries illustration and description of our improved type of Capillary Oiler Eccentric—unquestionably a superior outfit in many respects, although not as perfect a method of lubrication as the automatic, disc-oiling device illustrated above. Where a cleaner is to have constant service of a severe kind, and always for all large size machines, we recommend this disc-oiling device, knowing it exceeds in efficiency, durability and economy any method of oiling yet devised for a rice cleaner of any character.

"Monitor" Automatic Disc Oilers, shown above, are a simple, positive device. *Only one moving part* is employed to produce automatic oiling—this being *a solid, one-piece disc, which is not subject to wear and requires no adjusting.*

By observing the cut above you will note the heavily constructed, two-piece, adjustable, iron-bound, bronze eccentric heads with heavy lock nut for holding the large hexagon head adjusting screw in position. Eccentric heads are mounted in pairs with oiling disc located between same. As the eccentric shaft revolves the disc travels through the supply of oil in lower part of heavy iron reservoir (see cut) and oil is carried up to the stationary spreaders. These divide the stream of oil traveling on the disc—part of this supply flowing down each side on the spreaders and into the eccentric heads (observe cut).

Housed in a heavy iron, air-tight casing dust and dirt cannot reach these important working parts. Note the view at left showing removable cover in place—as in actual operation. No oil can leak out, oil soaked floors, condemned by Fire Insurance Underwriters everywhere, are eliminated. This device is very simple—*has no wearing parts* to cause trouble. It provides an abundance of lubrication without any care or attention other than filling the reservoir every sixty days. Worn or loose eccentrics, which give an exaggerated motion to the shakers and destroy every possibility of securing close, even screen separations, are unknown where "Monitor" Automatic Disc Oiling Eccentrics are used.

This outfit can be attached to nearly all of our different styles of separators. Where it is desired to use this oiling device on one of our separators not ordinarily supplied with same, we shall be pleased to quote prices for this additional equipment.

MONITOR RICE CLIPPER, CLEANER AND POLISHER

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	0	1	2	3	4	5	6	7	8	9	10	11
**Extreme height with shoe and feed hopper	5' 9"	5' 9"	6' 6"	6' 9"	7' 2"	7' 10"	8' 2"	8' 6"	8' 7"	9' 6"	10' 4"	10' 6"
Extreme height without feed hopper	5' 0"	5' 0"	5' 8"	6' 0"	6' 6"	7' 1"	7' 5"	7' 9"	7' 10"	8' 8"	9' 6"	9' 8"
Extreme length	6' 4"	6' 8"	7' 3"	7' 11"	8' 5"	9' 1"	9' 7"	10' 5"	11' 2"	12' 4"	13' 4"	13' 7"
Extreme width	3' 4"	3' 4"	3' 7"	4' 2"	4' 6"	4' 11"	5' 1"	5' 9"	6' 1"	6' 10"	7' 3"	7' 6"
Length on floor	4' 8"	5' 0"	5' 5"	5' 10"	6' 3"	6' 7"	7' 0"	7' 8"	8' 0"	8' 11"	9' 7"	9' 8"
Width on floor	2' 0"	2' 0"	2' 1"	2' 7"	2' 10"	3' 0"	3' 2"	3' 7"	3' 10"	4' 2"	4' 3"	4' 5"
Height to where rice enters, with feed hopper	5' 9"	5' 9"	6' 6"	6' 9"	7' 2"	7' 10"	8' 2"	8' 6"	8' 7"	9' 6"	10' 4"	10' 6"
Height to where rice enters, without feed hopper	5' 0"	5' 0"	5' 8"	6' 0"	6' 6"	7' 1"	7' 5"	7' 9"	7' 10"	8' 8"	9' 6"	9' 8"
Height to center of cylinder shaft (driving pulley)	2' 0"	2' 0"	2' 4"	2' 4"	2' 7"	2' 8"	2' 11"	3' 0"	3' 3"	3' 6"	3' 7"	3' 8"
Diameter of cylinder (driving) shaft, entire length	1 15/16"	1 15/16"	1 15/16"	2¼"	2¼"	2½"	2½"	3"	3"	3¼"	3½"	3½"
Speed, R. P. M. of cylinder (driving) shaft	600	600	575	550	525	500	475	450	425	400	375	450
Size of driving pulley	8" x 5"	8" x 5"	10" x 5"	12" x 6"	14" x 6"	16" x 7"	18" x 7"	20" x 8"	22" x 9"	24" x 10"	24" x 12"	24" x 12"
Capacity, pounds per hour	1200	1800	2700	3600	4800	6000	9000	12000	15000	21000	27000	33000
Approximate horse power required to operate	3 to 4	4 to 5	5 to 6	7 to 9	10 to 12	12 to 14	14 to 16	18 to 20	20 to 25	25 to 30	30 to 40	40 to 50
Approximate cubic feet crated for export	85	95	110	175	235	275	300	375	450	530	610	690
Net weight of machine, pounds	800	850	1000	1300	1700	2100	2300	3000	3800	4500	5200	5900
Approximate gross weight, crated for export, pounds	1100	1200	1600	1900	2400	2900	3200	4100	5000	6000	7000	8000

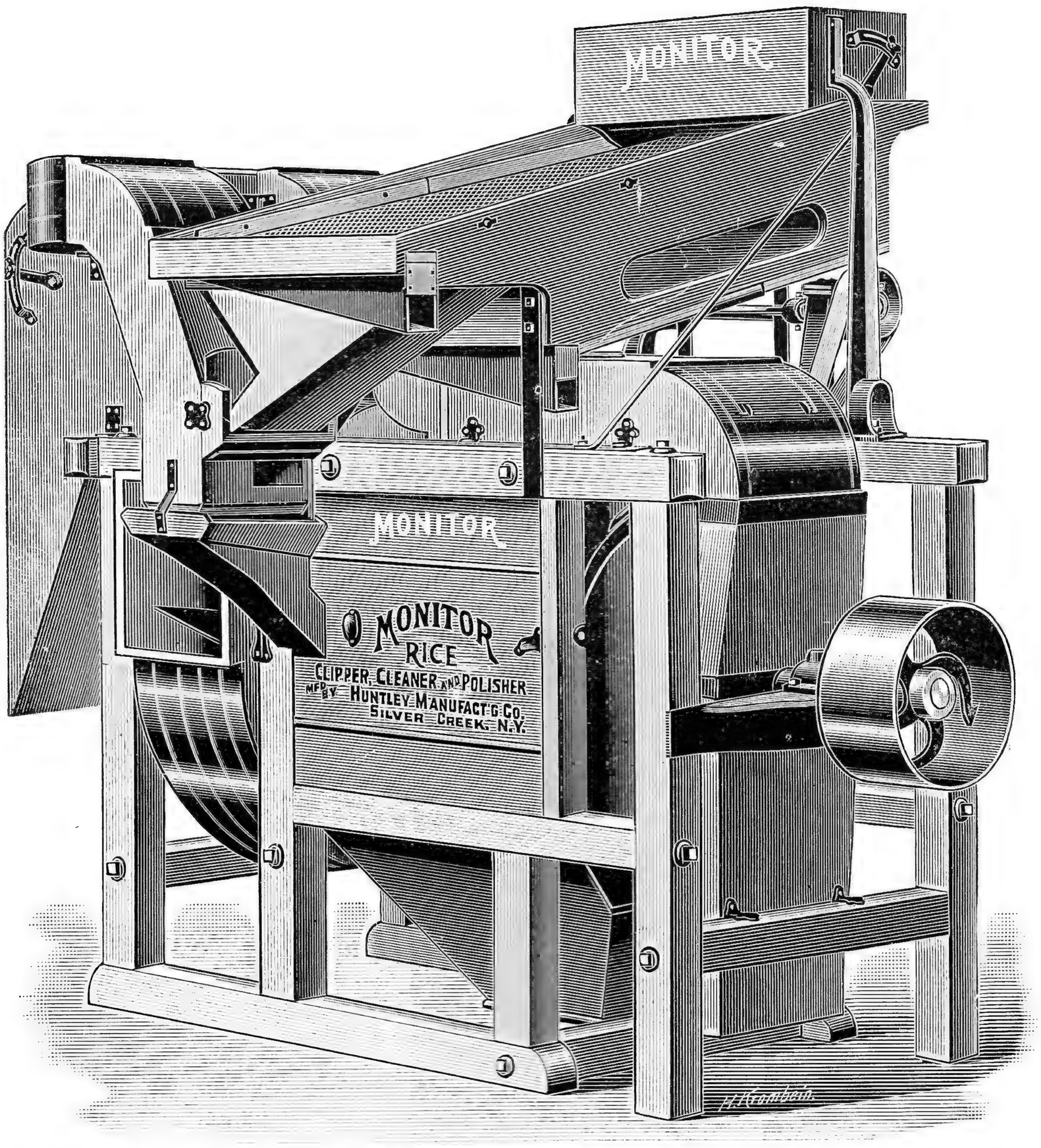
For prices see current price book.

**Experience proves that a Rice Clipper should never be used without a shoe, as the screens in the shoe are relied upon to remove from the stream of rice any pieces of iron or steel which, if allowed to enter the clipping cylinder, would wreck these parts and do great damage. Therefore, we list all "Monitor" Rice Clippers complete with shoe.

NOTE—Automatic Sieve Cleaners may be attached to screens in shaking shoes—an additional charge made for this attachment.

SIZE OF FAN OUTLETS—INSIDE MEASURE

SIZE NO.	0	1	2	3	4	5	6	7	8	9	10	11
Fan opening, depth	11½"	11½"	12½"	13½"	14½"	15½"	16½"	17¼"	18¾"	20¼"	20¼"	21¼"
Fan opening, width	9½"	9½"	10½"	11½"	12½"	13½"	14½"	15¼"	16¾"	18¼"	18¼"	20¼"
Total square inches for fan outlet	109	109	131	155	182	209	240	263	314	370	370	430



MONITOR RICE CLIPPER, CLEANER AND POLISHER

BY clipping off the stems and tails, as the first step in rice milling, this machine greatly simplifies and largely increases capacity of any mill. It removes stems, tails and beards without injury or waste; removes coarse impurities, clay balls, fine dirt, seeds and dust; scours and polishes the rice and greatly improves appearance; removes must perfectly; as a drier to condition rice damaged by wetting it gives fine results. Its best features are—noticeably light power for the character of work it performs; adaptability to any range of work desired; ease of regulation and closely governed operations; low operating and maintenance expense, and durability—features which have made it a favorite in many of the largest mills.

Operations are—two separate screen cleanings; straw, sticks and coarse impurities, also sand, seeds and fine dirt removed; next, rice is air cleaned by strong, sensitively controlled suction and passes to clipping cylinder. Clipping cylinder is adjustable, can be set to clip as desired. Clippings and dust which sift through openings in chilled clipping case are drawn off by suction. A second air cleaning is obtained after clipped rice leaves cylinder which insures a clean condition for the brightly polished, clipped rice as it leaves machine.

CONSTRUCTION—EQUIPMENT

Shaking shoe is one-piece type on the smaller sizes—a "single-shake" drive, counterbalanced in motion with counter-weight fly wheels; on the larger sizes two shoes are supplied, these have compound (counterbalanced) drive——Screenings tips, (these can be built to overhang at side, instead of end as shown in cut); the heavier of the aspirated impurities are discharged from these tips—Ventilation; our improved system provides sufficient air to insure perfect work——Clipping and polishing cylinder; our exclusive type, adjustable ——Clipping and polishing case is built in segments, has unequalled ventilating efficiency, is hardened by our special process——Bearings (fully exposed); deep reservoir, self-oiling (ring or chain) type—ball bearings at extra price, if desired——A compact, sturdy machine.

CRANSON RICE CLIPPER, CLEANER AND POLISHER

DIMENSIONS, CAPACITIES, ETC.

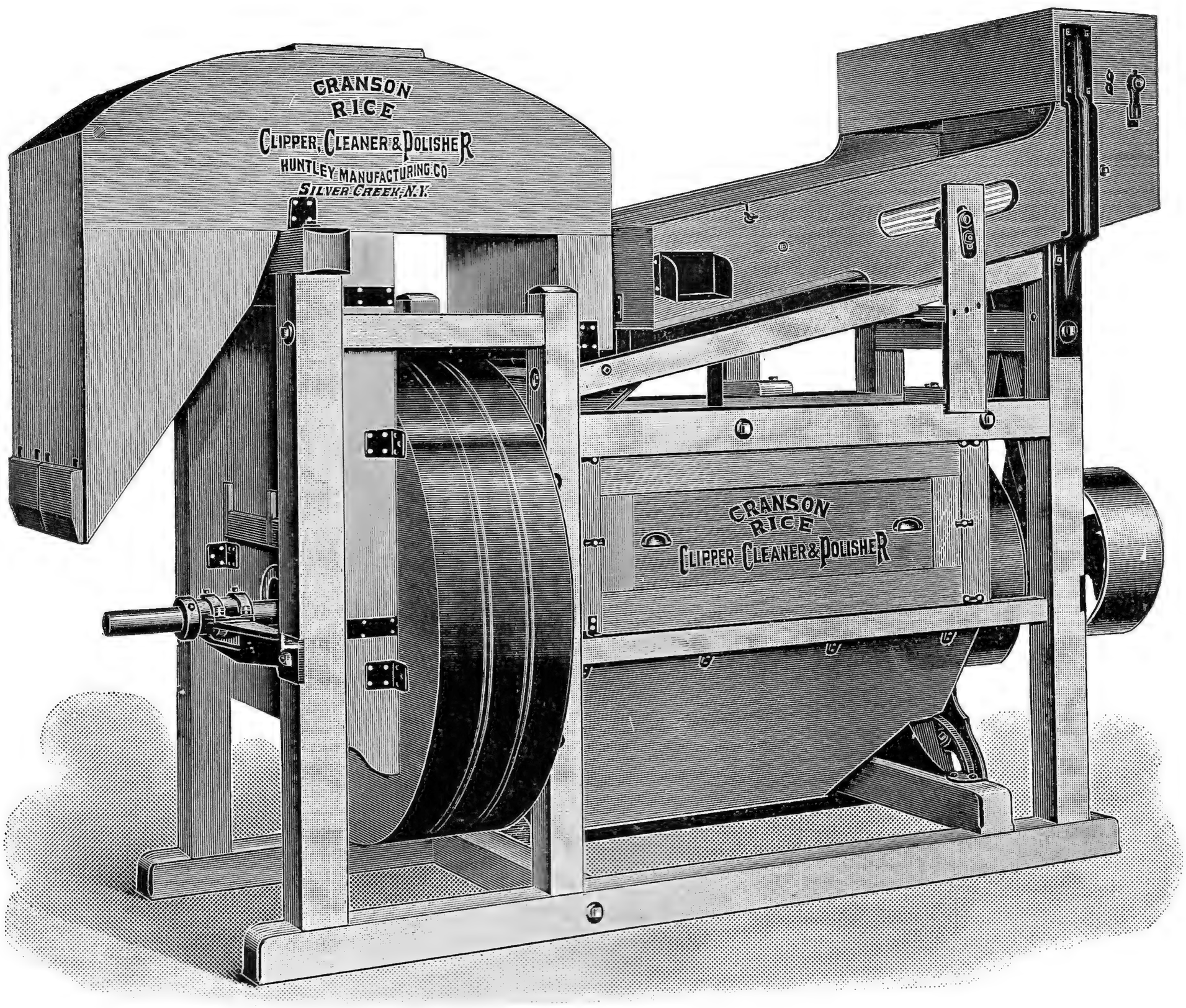
SIZE NO.	5	6	7	8
**Extreme height with shoe and feed hopper	5' 11"	6' 6"	6' 6"	7' 10"
Extreme length	7' 5"	8' 6"	8' 6"	10' 0"
Extreme width	2' 8"	3' 6"	3' 6"	4' 0"
Length on floor	6' 1"	7' 1"	7' 1"	8' 2"
Width on floor	2' 3"	2' 8"	2' 8"	3' 2"
Height to where rice enters	5' 11"	6' 6"	6' 6"	7' 10"
Height to center driving pulley	1' 10"	2' 2"	2' 2"	2' 7"
Speed, R. P. M. of cylinder shaft	600	500	500	450
Size of driving pulley	12" x 6"	16" x 7"	16" x 7"	20" x 8"
Capacity, pounds per hour	3600	4800	6000	9000
Approximate horse power to operate	7 to 9	10 to 12	12 to 14	14 to 16
Approximate cubic feet crated for export	160	210	255	280
Net weight of machine, pounds	1200	1600	1900	2100
Approximate gross weight crated for export, pounds.	1800	2300	2650	3100

For prices see current price book.

**Experience proves that a Rice Clipper should never be used without a shoe as the screens in the shoe are relied upon to remove from the stream of rice any pieces of iron or steel which, if allowed to enter the clipping cylinder, would wreck these parts and do great damage. Therefore, we list all "Monitor" Rice Clippers complete with shoe.

SIZE OF FAN OUTLET—INSIDE MEASURE

SIZE NO.	5	6	7	8
Fan opening, depth	10½"	13⅝"	13⅝"	15½"
Fan opening, width	9"	10"	10"	12"
Total square inches for fan outlet	94½	136¼	136¼	186

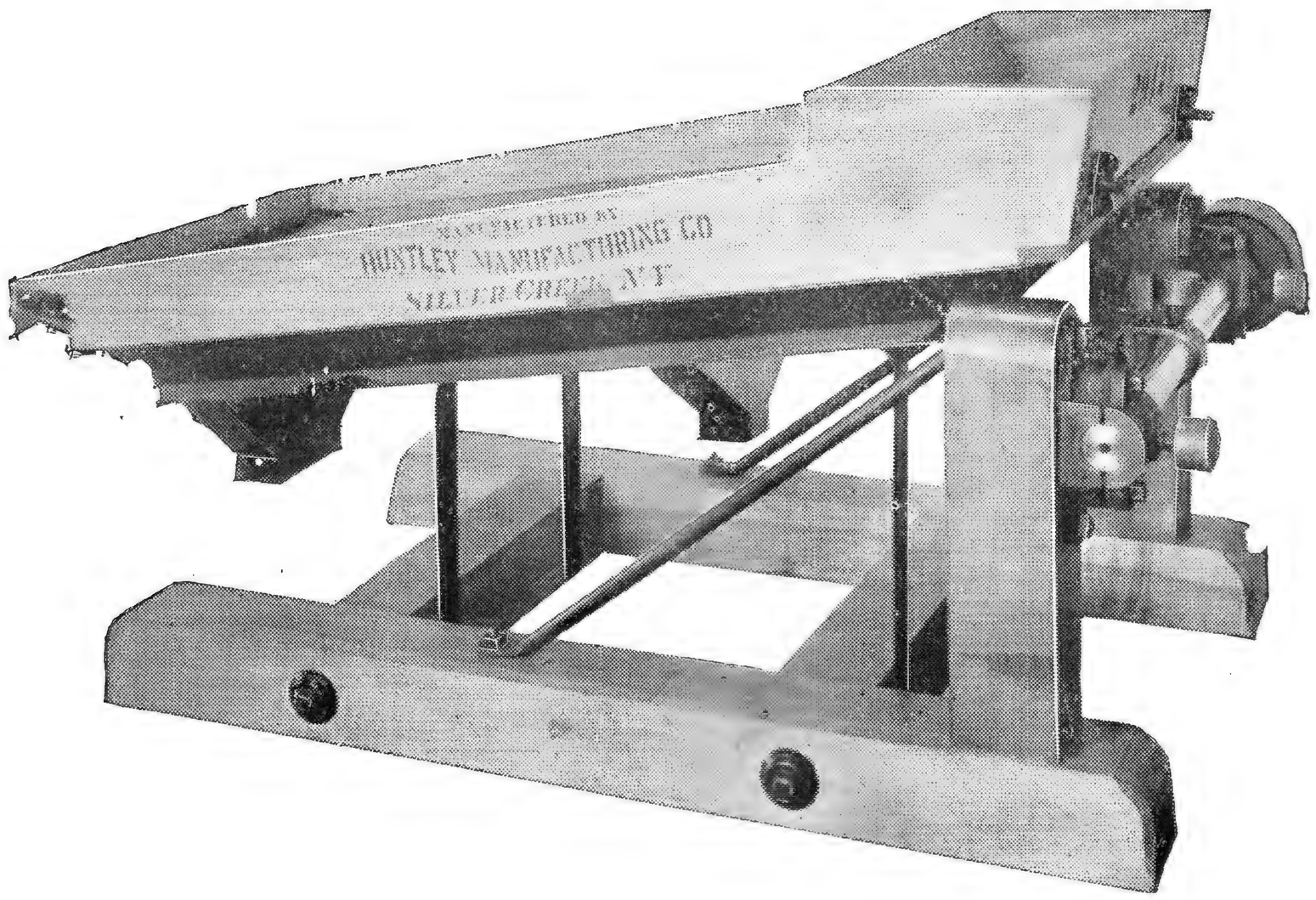


CRANSON RICE CLIPPER, CLEANER AND POLISHER

USED and endorsed by many rice millers, this machine gives fine service as a Rice Clipper, Rice Cleaner, Rice Polisher or Rice Drier and Conditioner. Very smooth running, light powered and easy to control to a nicety. Like all our products it has splendid wearing qualities, perfect manipulations and performs its operations without injuring or wasting good rice. Operations are: Two separate screen cleanings, strings, sticks, stones, straw and coarse trash, also black seeds, sand, fine dirt, etc., are taken out; next rice is subjected to a strong, easily controlled air suction which removes light impurities, after which rice passes into cylinder. Adjustability (clipping and polishing action to suit all conditions), abundant ventilation and uniform work are cylinder features; much clippings and dust sift through the chilled openings in clipping cylinder case, are drawn out to fan and discharged. Clipped and polished rice as it leaves the cylinder is given a second air cleaning, any remaining light impurities or dust are drawn off—the rice has a clean, attractive appearance as it leaves the machine. Rice damaged from being wet or in damp storage can be dried and conditioned with fine success with this machine.

CONSTRUCTION—EQUIPMENT

Shaking shoe is one-piece type, and the fine screen in same is fitted with an automatic traveling brush sieve cleaner—Screenings tips; every thing lifted out by the fans is carried into the settlings chamber, purified, the light dust going to the fan, the heavy stock discharging from valves at lower end of tips——Ventilation; a superior system, sufficient for every requirement——Clipping cylinder; extra long type, chilled tooth plates, adjustable ——Clipping case; segment style, perfect ventilation, hardened by our own process, all openings cast upon chills——Bearings are fully exposed, deep reservoir, self-oiling type (ring or chain)—ball bearings at extra price, if desired.



MONITOR ROUGHER AND SEMI-FINE RICE SHOE

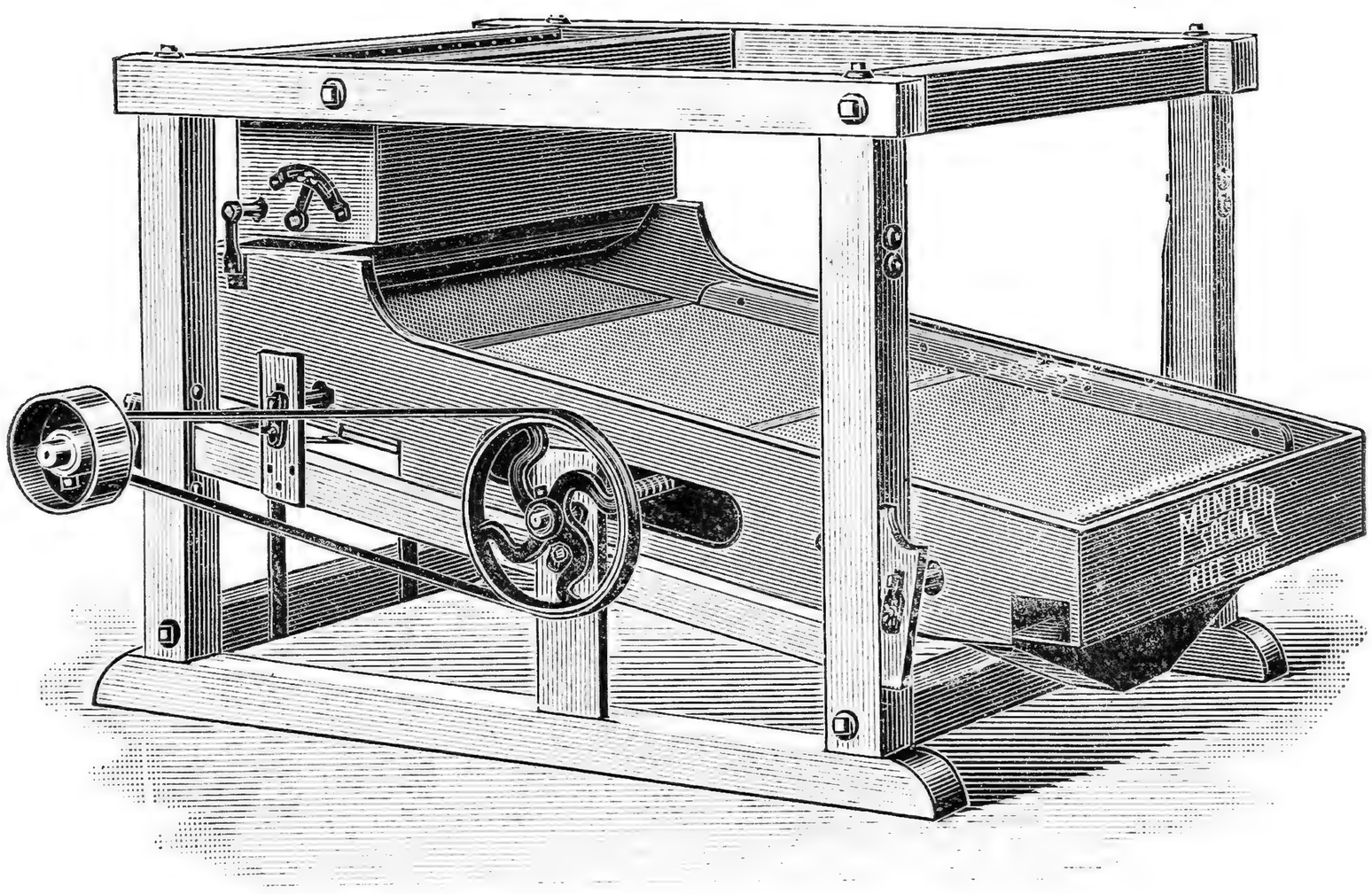
STYLE "B"

SUITABLE for a variety of cleaning purposes this staunch, easy-to-operate shaker can quickly be placed on the stream almost anywhere in the mill. As a rougher on unshelled rice, or as a semi-fine cleaner on rice in any state after hulling, it gives good service, taking small space and scarcely any power. Has two sections of screens—one for fine work and one for coarse. However, screens are removable and can be fitted with any size of perforation desired and used for many kinds of work. A "Monitor"—built and fitted in first class manner, a superior outfit for the uses intended.

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	1	2	3	4	5	6
Extreme height	1' 10"	1' 10"	2' 0"	2' 3"	2' 4"	2' 8"
Extreme length	3' 1"	3' 6"	3' 8"	3' 8"	4' 5"	4' 9"
Extreme width	1' 10"	1' 11"	2' 5"	2' 7"	3' 0"	3' 7"
Length on floor	2' 8"	3' 1"	3' 4"	3' 4"	4' 1"	4' 4"
Width on floor	1' 7"	1' 8"	2' 1"	2' 3"	2' 8"	3' 2"
Height to where rice enters	1' 10"	1' 10"	2' 0"	2' 3"	2' 4"	2' 8"
Height to center of shaker shaft	0' 11"	1' 1"	1' 1"	1' 2"	1' 4"	1' 10"
Speed, R. P. M.	600	600	600	600	600	550
Size driving pulley	4" x 3"	4" x 3"	5" x 4 "	5" x 4"	6" x 4"	7" x 5"
Capacity, pounds per hour	1050 to 1750	1200 to 2000	1650 to 2750	1800 to 3000	2400 to 4000	3900 to 6500
Approximate horse power to operate	¼	¼	¼	¼	⅜	⅜
Approximate cubic feet crated for export	13	15	20	25	35	50
Net weight of machine, pounds	80	95	120	160	200	275
Approximate gross weight crated for export, pounds	130	150	180	250	300	400

For prices see current price book.



MONITOR RICE CLASSIFIER—BREWERS' RICE SHOE

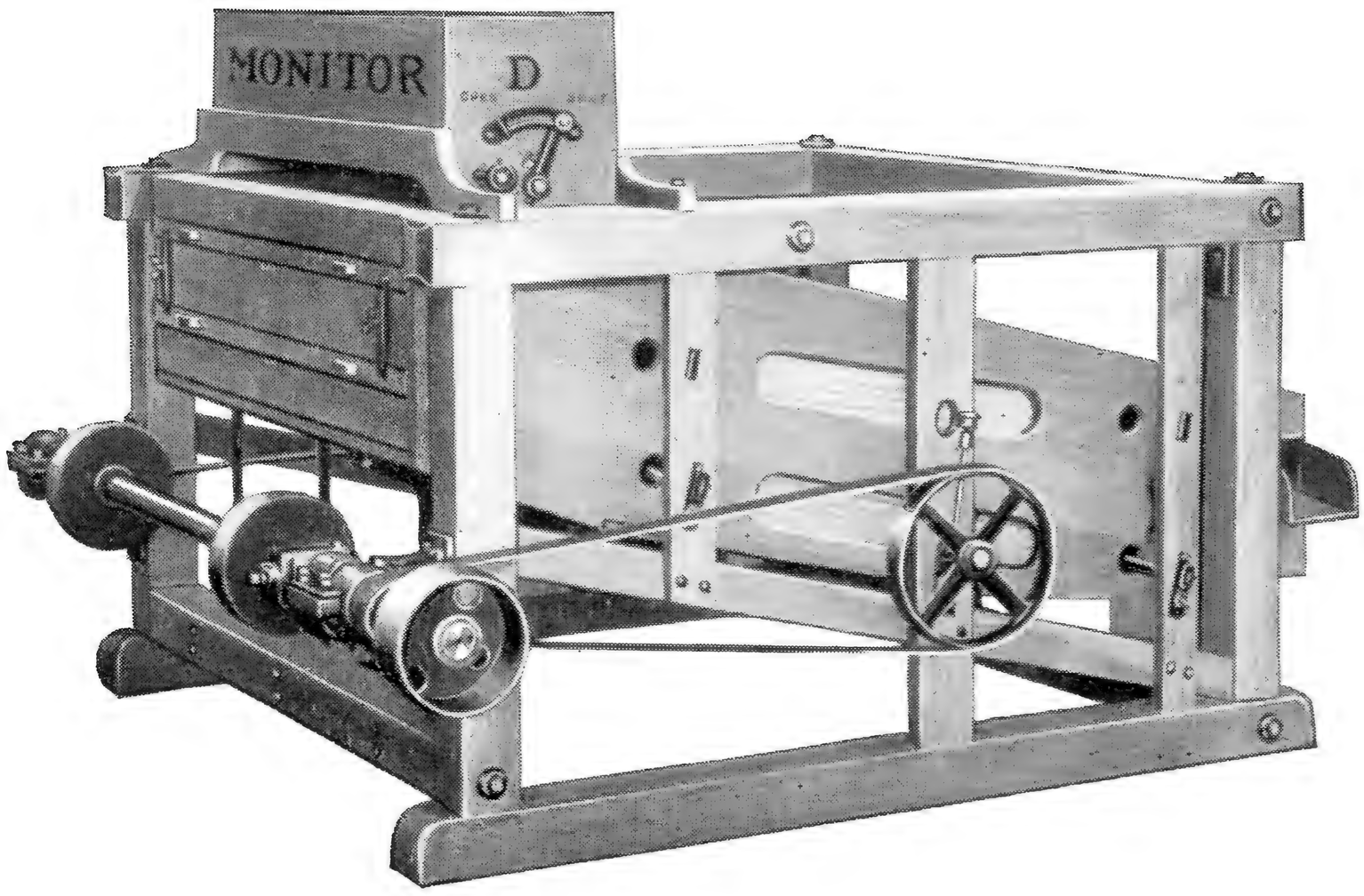
FOR removing the fine grade of rice ahead of the polisher, or for any special work in obtaining two sizes of rice. Delivers two perfectly sized grades of either rough or hulled rice. Has extra large area of screen surface and a dependable, automatic sieve cleaner which continuously keeps every perforation open,—full capacity is maintained, while grading of an accurately uniform kind is performed. A heavy-duty outfit of superb constructon, a shoe which will outlast the severest service and give fine results with little care and power. Heavy, selected hardwood supporting frame——One-piece type shaking shoe, counterbalanced in motion by fiy wheels on shaker shaft——Feed hopper provided with an adjustable feed gate and a vibrating feeder—Shaker shaft is of large diameter, high grade steel, accurately machine sized, and—operates in self-oiling bearings, see page 17——Two eccentrics drive shaker, these are self-oiling type, shown on page 18.

NOTE:—We build several other types of "Classifier Shoes" for making three, four or five grades. If interested in anything of this kind we should be glad to send you specifications and prices.

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	3	4	5	6	7	8
Extreme height	3' 7"	3' 7"	3' 7"	3' 7"	3' 7"	3' 7"
Extreme length	6' 1"	6' 1"	6' 1"	6' 2"	6' 3"	6' 3"
Extreme width	3' 2"	4' 0"	4' 6"	5' 2"	5' 8"	6' 3"
Length on floor	5' 1"	5' 1"	5' 1"	5' 1"	5' 1"	5' 1"
Width on floor	2' 7"	3' 2"	3' 8"	4' 2"	4' 8"	5' 1"
Height to where rice enters	3' 7"	3' 7"	3' 7"	3' 7"	3' 7"	3' 7"
Height to center shaker shaft	1' 5"	1' 5"	1' 5"	1' 5"	1' 5"	1' 5"
Speed, R. P. M.	600	600	600	600	600	600
Size of driving pulley	6" x 3½"	6" x 3½"	6" x 3½"	8" x 3½"	10"x3½"	10"x4½"
Capacity, pounds per hour	1100	1500	1800	2100	2450	2700
Horse power to operate	¼	¼	⅜	⅜	½	½
Approximate cubic feet crated for export	55	70	80	90	105	120
Net weight, pounds	300	375	460	550	675	825
Approximate gross weight crated for export, pounds	450	550	700	775	1050	1300

For prices see current price book.



MONITOR UNIVERSAL RICE CLEANING SHOE

STYLE "D"

ANY class of cleaning for any kind or condition of rice, the maximum of close gauged screen cleaning—a shoe specially designed for hard service and continuous usage.

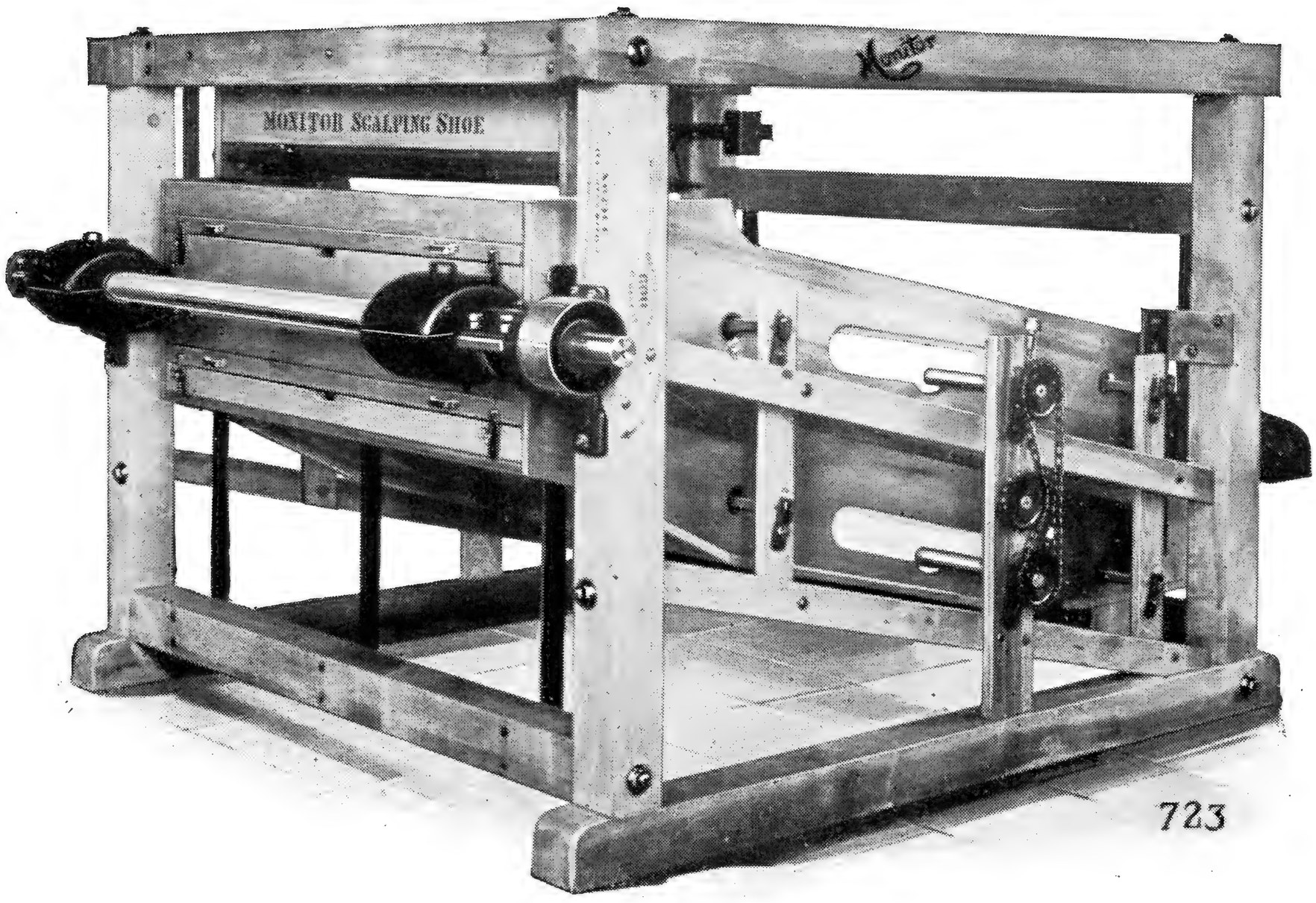
Uncommonly large screen surface, wide range of cleaning, nicety of adjustment, uniformly perfect work and durability are noteworthy features. It has two deep runs of interchangeable screens; these ordinarily clothed one for coarse and one for fine work (easily changed for any special work). Automatic sieve cleaners can be attached to either or both screens—these insure clean screens, full capacity and the utmost in accurate separations——Heavy-duty, refined construction——Main frame, heavy selected hardwood——Shaking shoe, one-piece type, counterbalanced by fly wheels on shaker shaft——Feed hopper has adjustable feed gate, also vibrating feeder—Shaker shaft is of heavy, high grade steel, machine sized; operates in self-oiling bearings, see page 17——Two eccentrics driving shaker are self-oiling type, shown on page 18——A fine shoe for all around rice cleaning.

NOTE:—In the larger sizes we build this shoe special on request—having a "compound" drive, instead of one full shoe, two half shoes are used—mounted one above the other. See page 27.

DIMENSIONS, CAPACITIES, ETC.

SIZE NO	1	2	3	4	5	6	7	8	9
Extreme height	3' 7"	3' 8"	3' 11"	4' 1"	4' 4"	4' 7"	4' 8"	4' 8"	5' 0"
Extreme length	4' 4"	5' 1"	5' 6"	5' 10"	6' 3"	6' 7"	7' 7"	7' 8"	9' 0"
Extreme width	3' 5"	3' 11"	4' 5"	5' 0"	5' 7"	5' 11"	6' 6"	7' 1"	8' 3"
Length on floor	4' 2"	4' 9"	5' 1"	5' 5"	5' 9"	6' 3"	6' 9"	6' 9"	8' 2"
Width on floor	2' 8"	3' 2"	3' 8"	4' 3"	4' 9"	5' 2"	5' 7"	6' 2"	8' 4"
Height to where rice enters	3' 7"	3' 8"	3' 11"	4' 1"	4' 4"	4' 7"	4' 8"	4' 8"	5' 0"
Height to center of shaker shaft	0' 10"	1' 0"	1' 2"	1' 4"	1' 6"	1' 8"	2' 0"	2' 0"	2' 2"
Speed, R. P. M.	600	600	600	600	600	600	600	600	600
Size driving pulley	5"x3½"	5"x3½"	6"x3½"	6"x3½"	6"x3½"	6"x3½"	8"x3½"	10"x3½"	10"x3½"
Capacity, pounds per hour	1800 to 3000	2700 to 4500	3450 to 5750	4200 to 7000	5600 to 9350	6600 to 11000	8600 to 14300	9000 to 15000	13750 to 22950
Approximate horse power to operate	⅜	⅜	⅜	½	½	½	⅝	⅝	⅝
Approximate cubic feet crated for export	50	65	95	140	155	170	195	230	265
Net weight of machine, pounds	400	485	535	670	835	975	1100	1275	1800
Approximate gross weight crated for export, pounds	600	725	850	1000	1250	1450	1650	1900	2450

For prices see current price book.



MONITOR RECEIVING AND SCALPING SHOE

Compound (Self-Balancing) Drive

FOR smoothness in operation, quiet running, ease of control and true uniformity in separations this model excels, widely—our reply to the demand for a general-purpose, highly efficient shoe that will outlast the severest service. Two deep runs of (interchangeable) screens, one each carried in separate shoes, which are suspended one over the other—each driven by two heavy-duty, dust-proof, self-oiling eccentrics (see page 19), opposed in pairs, and operated by one uncommonly heavy eccentric shaft, which travels in dust-proof, self-oiling bearings (illustrated page 18). Automatic, under-the-screen sieve cleaners can be attached to either, or both of the large-area screens, giving maximum capacity and uniformly true separations continuously. Main frame is ultra-heavy construction, of air-dried, selected hardwood, machine mortised and tenoned—secured to place with heavy bolts. Feed hopper is provided with adjustable feed gate and vibrating distributor. In thoroughness of equipment and cleaning performance this light-powered, pleasingly simple shoe exceeds the demand of the most severely critical users.

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	75	76	77	78	79	80	81	82	83
Extreme height	4' 5"	4' 7"	4' 11"	4' 11"	5' 4"	5' 4"	5' 4"	5' 4"	5' 4"
Extreme length	6' 8"	7' 3"	7' 11"	8' 0"	9' 3"	9' 3"	9' 3"	9' 3"	9' 3"
Extreme width	5' 10"	6' 6"	6' 10"	7' 3"	8' 5"	8' 11"	9' 6"	10' 1"	10' 9"
Length on floor	5' 9"	6' 4"	7' 0"	7' 0"	8' 4"	8' 4"	8' 4"	8' 4"	8' 4"
Width on floor	5' 5"	5' 10"	6' 4"	6' 11"	7' 11"	8' 5"	8' 11"	9' 5"	9' 11"
Height to where grain enters	4' 5"	4' 7"	4' 11"	4' 11"	5' 4"	5' 4"	5' 4"	5' 4"	5' 4"
Height to center of drive pulley	2' 6"	2' 8"	3' 0"	3' 0"	2' 9"	2' 9"	2' 9"	2' 9"	2' 9"
Speed—R.P.M. of eccentric shaft	600	600	575	550	550	525	525	525	525
Size of drive pulley	6"x3½"	6"x3½"	3"x3½"	10"x3½"	10"x3½"	10"x3½"	10"x3½"	10"x4½"	10"x5½"
Capacity, pounds per hour	7400 to 9350	8800 to 11000	11400 to 14300	12500 to 15500	16350 to 22950	20050 to 25050	21800 to 27250	23544 to 29975	25227 to 31972
Approximate horse power	¾	¾	1	1	1¼	1½	2	2¼	2½
Approximate cubic feet crated for export									
Net weight of machine									
Approximate gross weight, crated for export									

For prices see current price book.

MONITOR PADDY SEPARATOR—Single Type

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	12	18	24	30	36	45	51
Extreme height	4' 7"	4' 7"	4' 7"	4' 7"	4' 7"	4' 7"	4' 7"
Extreme length	8' 10"	10' 2"	11' 6"	12' 10"	14' 2"	16' 3"	17' 8"
Extreme width	7' 6"	7' 6"	7' 6"	7' 6"	7' 6"	7' 6"	7' 6"
Length on floor	8' 10"	10' 2"	11' 6"	12' 10"	14' 2"	16' 3"	17' 8"
Width on floor	4' 3"	4' 3"	4' 3"	4' 3"	4' 3"	4' 3"	4' 3"
Height to where rice enters	4' 7"	4' 7"	4' 7"	4' 7"	4' 7"	4' 7"	4' 7"
Height to center of driving shaft	2' 0"	2' 0"	2' 0"	2' 0"	2' 0"	2' 0"	2' 0"
Speed, R. P. M. of drive shaft	100	100	100	100	100	100	100
Size of driving pulley, inches	16" x 5"	16" x 5"	20" x 5"	24" x 6"	30" x 6"	30" x 6"	36" x 6"
Capacity, pounds per hour	1440	2160	2880	3600	4320	5400	6120
Horse power required to operate	¾	¾	1	1	1¼	1½	1¾
Approximate cubic feet crated for export	220	255	290	335	370	410	450
Net weight of machine, pounds	2500	2700	3150	3700	4200	5000	5450
Approximate gross weight crated for export pounds	3100	3400	3900	4600	5200	6000	6500

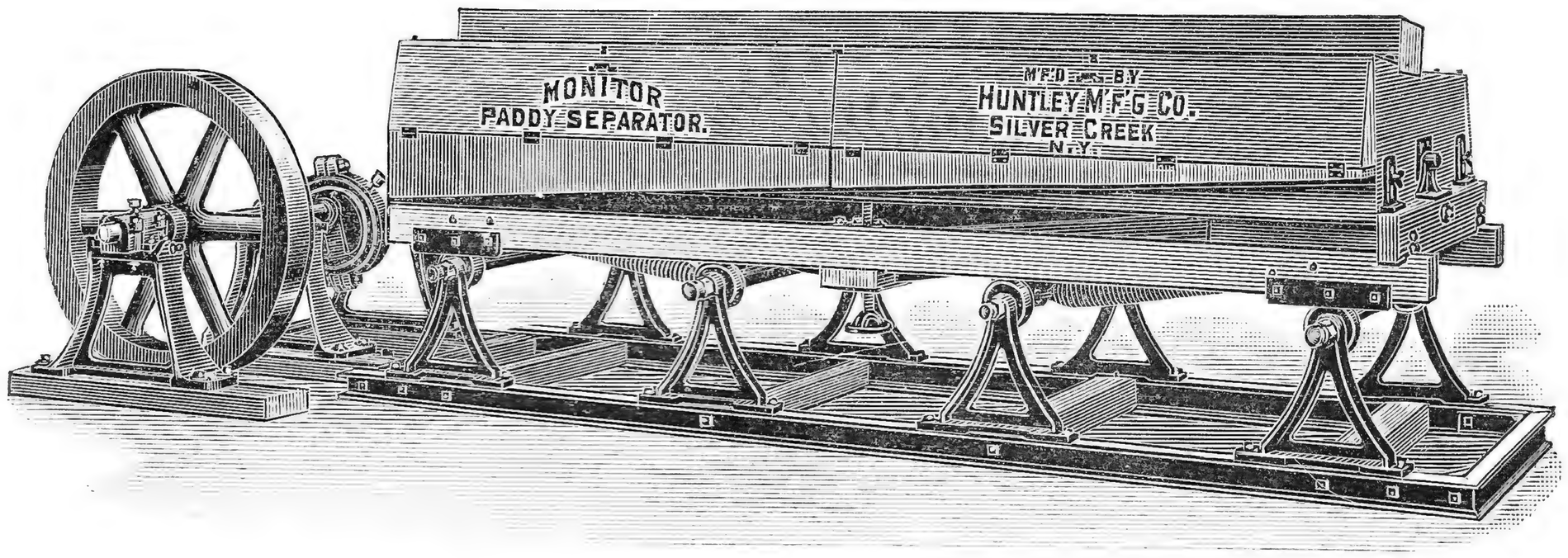
For prices see current price book.

HOW IT OPERATES

Rice is delivered into feed box which extends across full length of table; this box has an individual feed outlet to each channel—all of these feed outlet openings are controlled by an adjustment from end of machine—which insures simple operation and uniform feed for all the channels. The channels are peculiarly shaped, iron walls built between the smooth iron table surface and an overhead structure—channels extending zig-zag across narrow way of table. With the correct pitch (selective) to the table, proper throw to the eccentrics, and the correct speed (changeable) for same, the separations of paddy from hulled rice is obtained—one separating from the other, the paddy (unhulled rice) traveling up through channels on the incline table surface, and discharging over dams at side of machine; the hulled rice traveling down the channels and discharging at opposite side of machine. Any change in class or condition of rice being treated is easily taken care of by manipulation of the adjustments, which give instantaneous change.

We advocate the use of our "Monitor" Cone Pulley Drive—with same the belt which drives the table travels on cone pulley, and has shifting lever and gauge; while in motion speed is changed, the changes quick and positive, speed is controlled to a nicety.

CONE PULLEY VARIABLE SPEED—for regulating the speed while machine is running. All "Monitor" Paddy Separators are supplied with two cone pulleys (the purchaser places one of these on a special counter-shaft, and the other on his line shaft to drive the counter). This outfit is very essential—while machine is in motion the number of revolutions may be changed quickly and positively to suit any variation in stock being treated.



MONITOR PADDY SEPARATOR—Single Type

A machine which insures the highest yield of head rice, simplifies rice hulling and proves a big earning power to every user.

Large, well matured rice hulls easier than small rice; shelling or hulling sufficient to remove the outer husk from small rice invariably proves too severe for large rice, which means breakage and waste of the choicest stock. By using this "Monitor" the huller can be regulated to a point where as much as possible of the rice may be hulled in one operation without breakage. The stock coming from the sheller is a mixture of hulled and unhulled rice (paddy), this is delivered to the "Monitor" Paddy Separator, where a perfect separation is made upon a varied-motion-and-pitch shaking table, the paddy is then sent to a huller for a second hulling.

The "Monitor" Paddy Separator is the result of years of persistent effort to produce an absolutely reliable machine—something to simplify and inprove other methods of separating hulled rice from paddy—our success is attested to by many of the world's largest rice millers who concede the "Monitor" to be the only Paddy Separator which gives true separations under all the varied conditions met with in milling rice. Adaptability is one of this machine's crowning features, it is easily and instantaneously regulated to meet any change in the class or condition of the rice being handled—its precision of adjustment is incomparable, the standard for separations once established its work continues with remarkable uniformity. With ultra-heavy, refined construction, the maximum of wearing qualities are obtained while large capacity, lessened care and attention are prominent features. We back this machine with this unqualified guarantee:—Closer, more uniform (and less wasteful) separations than any other machine will produce.

CONSTRUCTION—EQUIPMENT

Table is built in tiers, each having a surface of extra-heavy metal, and sectional doors for inspection——Channels are reinforced construction, our exclusive style of shape and spacing——Feed box extends full length of machine, and has separate opening for each channel and—with one adjustment for all——This machine is set on a heavy, reinforced iron bed; the table is mounted on a supporting frame which is suspended on tilting ways, and rides on brass bushed trunnions——The drive is strictly heavy-duty type. Massive, durable construction, adjustable eccentrics drive the frame carrying the table. Eccentrics have compression oilers——Heavy bearings carry the crank shaft, this shaft is of large diameter, high grade steel, accurately machine sized——The motion of the shaking parts is counterbalanced by placing a heavy, counterweight fly wheel on the crank shaft——The table travels at uncommonly high speed, producing an unique wave motion peculiar to the "Monitor" only——Adjustment for the pitch of tables and *speed of same is instantaneous and closely governed——General Construction; the best that is known to rice machinery—absolutely perfect in every respect.

*VARIABLE SPEED. We regularly supply with these machines (although cut does not show it) our perfected cone pulley drive—see note, foot of opposite page.

MONITOR PADDY SEPARATOR—Tandem Type

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	72	90	102	120
Extreme height	4' 7"	4' 7"	4' 7"	4' 7"
Extreme length	24' 11"	29' 1"	31' 11"	36' 1"
Extreme width	6' 8"	6' 8"	6' 8"	6' 8"
Length on floor	24' 11"	29' 1"	31' 11"	36' 1"
Width on floor	4' 7"	4' 7"	4' 7"	4' 7"
Height to where rice enters	4' 7"	4' 7"	4' 7"	4' 7"
Height to center of driving shaft	2' 0"	2' 0"	2' 0"	2' 0"
Speed, R. P. M. of drive shaft	100	100	100	100
Size of driving pulley	36" x 6"	36" x 6"	36" x 6"	36" x 6"
Capacity, pounds per hour	8640	10800	12240	14400
Horse power required to operate	3½	4	5	6
Approximate cubic feet crated for export	650	730	790	890
Net weight of machine, pounds	7300	7700	8250	8500
Approximate gross weight, crated for export, pounds	8800	10300	10800	11500

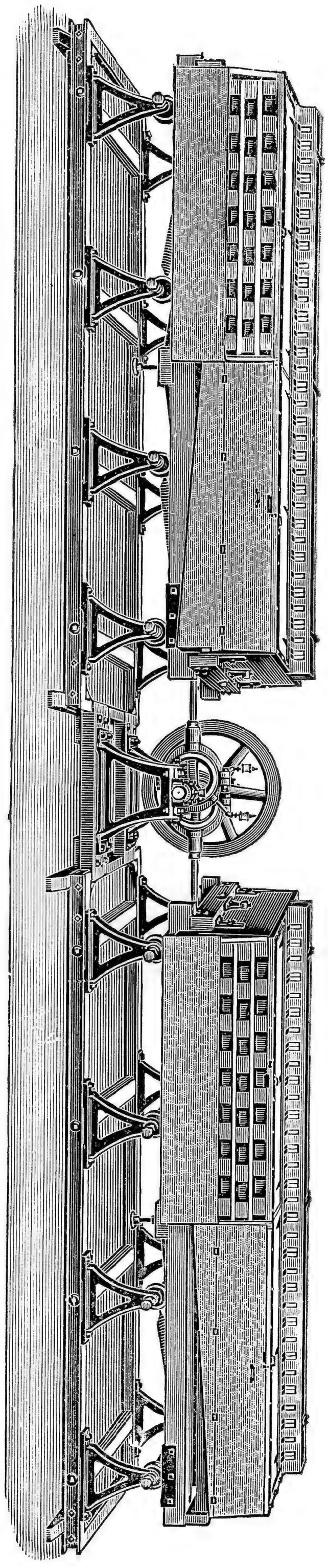
For prices see current price book.

CONSTRUCTION—EQUIPMENT

Tables built in tiers, each having a surface of extra heavy planished iron, fully enclosed, with doors (in sections) for inspection——Channels are reinforced construction, our exclusive style of shape and spacing——Feed box extends full length of tables, has separate opening for each channel, and one adjustment for all——The two supporting shoes which carry the tables are suspended on tilting ways, and ride on brass bushed trunnions, these operate in solid pillar bearings securely fastened to the heavy channel iron foundation frame——The eccentric drive is our improved, heavy-service type. Large, heavy-duty eccentrics (adjustable) drive the shoes which carry the tables, eccentrics have compression oilers——The eccentric shaft travels in massive pillar bearings, this shaft is large diameter, high grade steel, accurately machine sized——The two tables travel at uncommonly high speed, producing an unique wave motion which is not known to any other paddy separator——Adjustment for pitch of tables, and speed of same is instantaneous, correctly governed by gauges ——General Construction; comparison proves there is nothing equalling these "Monitors" in grade of material, refined workmanship and fit, and simplified arrangement.

CONE PULLEY VARIABLE SPEED—for regulating the speed while machine is running. All "Monitor" Paddy Separators are supplied with two cone pulleys (the purchaser places one of these on a special counter-shaft, and the other on his line shaft to drive the counter). This outfit is very essential—while machine is in motion the number of revolutions may be changed quickly and positively to suit any variation in stock being treated.

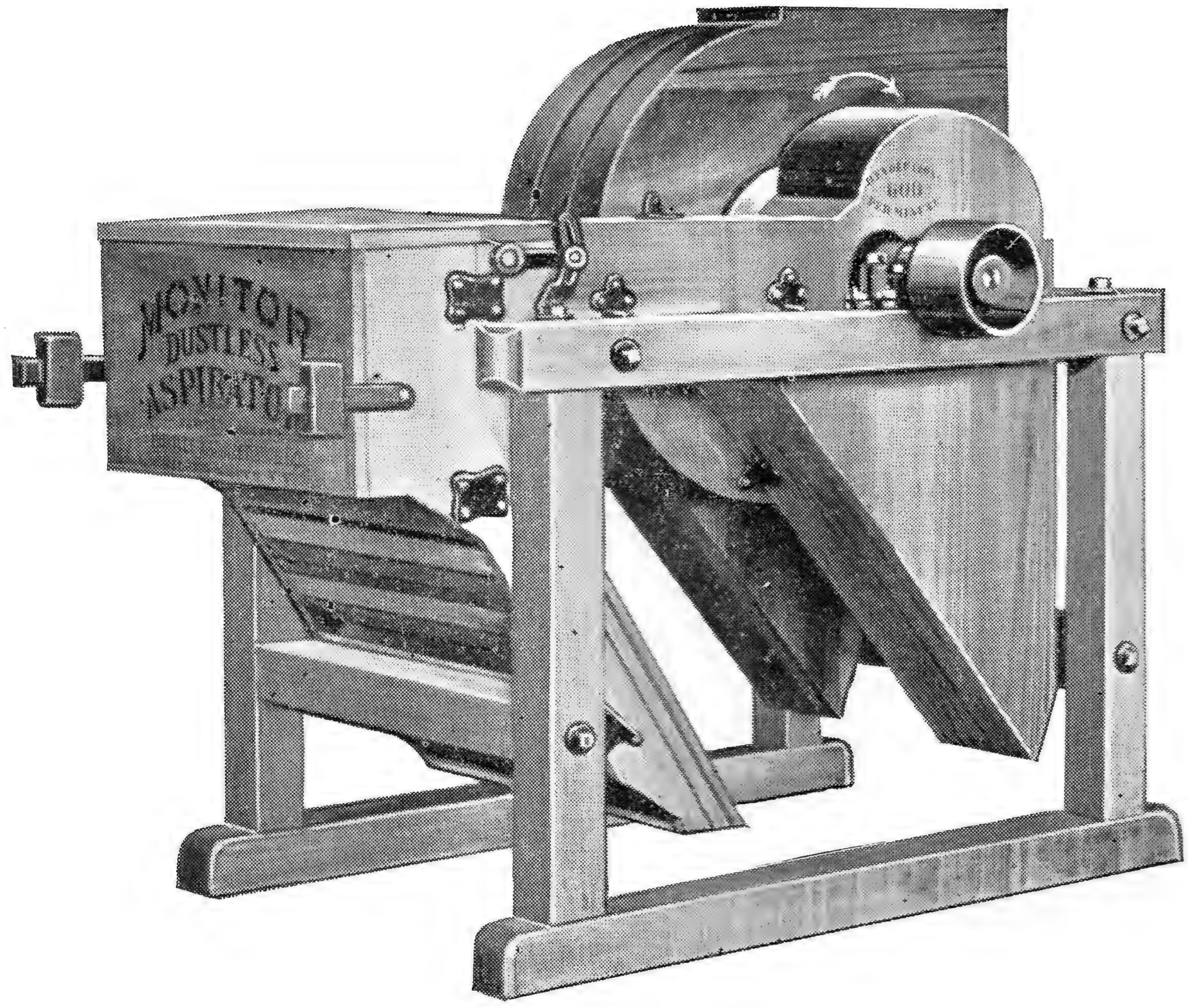
MONITOR PADDY SEPARATOR—Tandem Type



POSSESSING all the perfected features of our "Single Type" Paddy Separator, illustrated on page 29, this machine meets the most exacting demands for a large capacity outfit. Being the same as our "Single" Machine in principle, and capable of the same phenominal work, we unhesitatingly guarantee separations of hulled rice from paddy that cannot be equalled for uniformity and ease of operation. To obtain the increased capacity over our "Single" Machine we use two of our exclusive "Monitor" design of varied-motion-and-pitch shaking tables, maintaining these on one rigid, reinforced metal bed, and driving both tables from one large eccentric shaft; the two tables weighing exactly the same, and the drive being directly opposed, a very smooth reciprocating motion results—the maximum of satisfactory operation and durability are a certainty.

An important feature of "Monitor" Paddy Separators is their simplicity—our machines are devoid of intricate mechanism; they are strongly and compactly built, more so than any other maker turns out, yet they have fewer operating parts, which means fewer things to wear and cause trouble.

OPERATION—For description see page 28, "How It Operates"—the one description will suffice for both our "Single" and "Tandem" Machines, the only difference being in the number of tables and method of driving them.



MONITOR ASPIRATOR

STYLE "A"

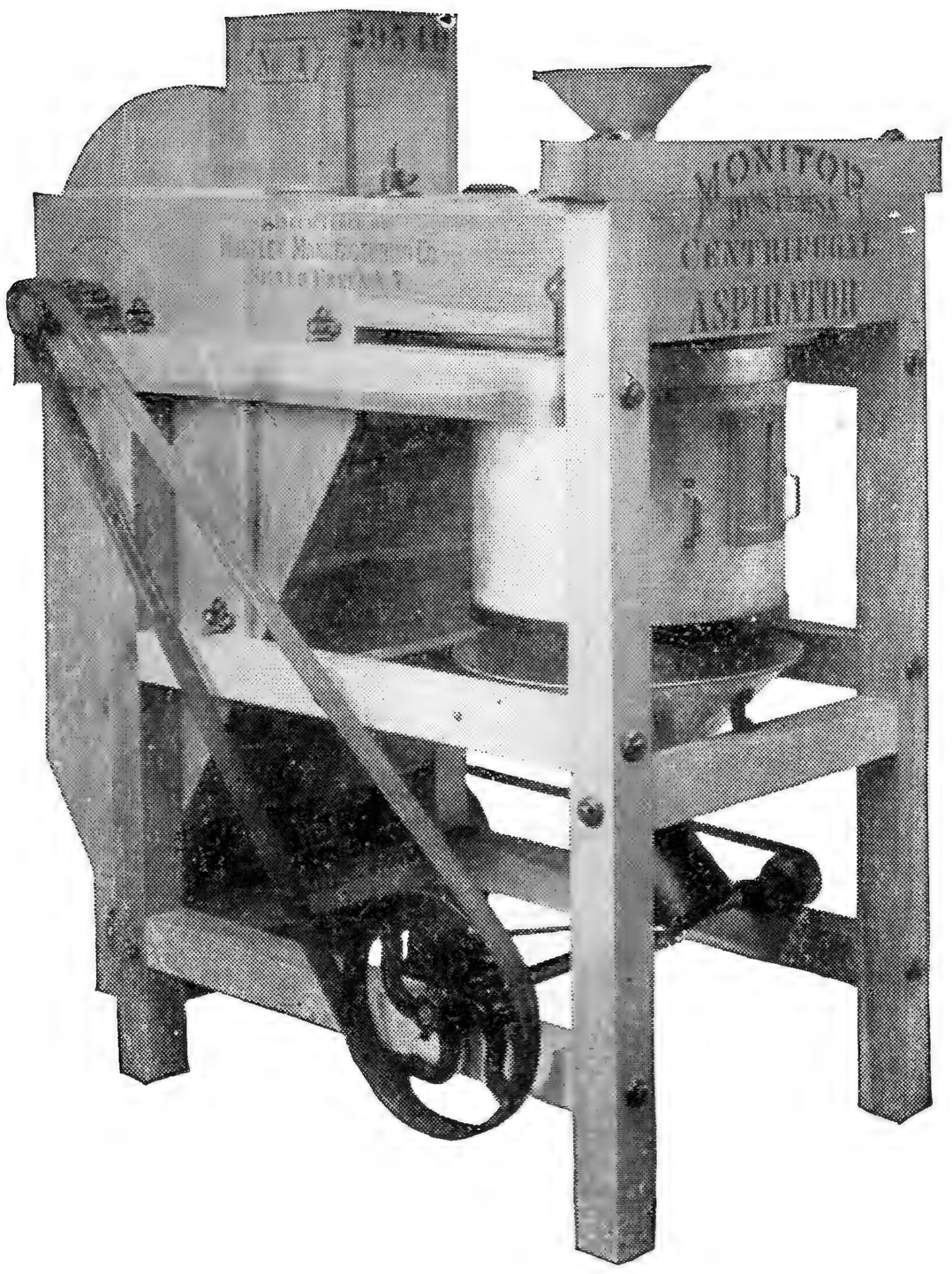
FOR removing husks or dust this Aspirator or "Fanner" can be used with perfect success —after the brush or anywhere else on the stream, as desired. It is built with deep settlings chambers into which the husks and dust pass, where the heavier stock is purified, husks discharging from settlings chamber tips, dust from fan. Rice is delivered into feed hopper, this equipped with valve to regulate quantity of feed intake and an oscillating feeder which spreads rice evenly across full width of aspirating leg. This leg is uncommonly deep, its interior consists of a series of defiecting shelves; as the rice drops down the leg it is repeatedly caught up by the shelves, each time the suction renews its work—extraordinarily fine aspirating results are obtained. All internal parts which the rice comes in contact with are metal covered to protect against wear. A simple, serviceable outfit, built as we build all "Monitors"—perfectly.

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	2	3	4	5	6
Extreme height	3' 6"	3' 11"	4' 5"	5' 1"	5' 8"
Extreme length	3' 8"	4' 1"	5' 0"	5' 11"	6' 6"
Extreme width	2' 7"	2' 11"	3' 6"	4' 2"	4' 9"
Length on floor	3' 6"	3' 9"	4' 5"	5' 4"	5' 11"
Width on floor	2' 2"	2' 6"	3' 1"	3' 8"	4' 3"
Height to where rice enters	2' 8"	3' 0"	3' 3"	3' 10"	4' 4"
Height to center of fan (driving) shaft	2' 5"	2' 9"	2' 11"	3' 6"	3' 11"
Speed, R. P. M. of fan shaft	600	600	600	600	600
Size of driving pulley	5" x 3"	6" x 3"	6" x 3"	7" x 3"	8" x 3"
Capacity, pounds per hour	3150	4750	6600	8700	11800
Horse power to operate	1½	2	2½	3	3½
Approximate cubic feet crated for export	38	65	95	130	160
Net weight of machine, pounds	210	305	400	480	530
Approximate gross weight crated for export, pounds	400	475	600	725	800

For prices see current price book.

SIZE NO.		2	3	4	5	6
Fan opening, depth	Size of Fan Outlet—	8⅜"	9"	11½"	12½"	13½"
Fan opening, width	Inside Measure	5⅞"	7"	7½"	8"	9"



MONITOR CENTRIFUGAL ASPIRATOR

WHERE the requirements in aspirating work demand the rarest of perfect definition and, also, the maximum of capacity to the space taken, "Monitor" Centrifugal Aspirators answer perfectly. In designing these machines we have embodied features that experience proves are essential to insure perfect service with aspirators of this type. They are simple, serviceable machines, which will deliver efficient and economical work. The illustration shows our standard "single" machine equipped with fan suction settlings chamber—we also build these in "double", "triple" and "quadruplet" arrangement with capacities accordingly larger than table below gives.

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	1	2	3	4
Diameter, disc, inches	12"	16"	20"	24"
Extreme height	4' 10"	5' 0"	5' 2"	5' 4"
Extreme length	4' 6"	4' 10"	5' 5"	5' 6"
Extreme width	2' 9"	3' 1"	3' 6"	3' 10"
Length on floor	3' 1"	3' 5"	3' 9"	4' 1"
Width on floor	2' 2"	2' 6"	2' 10"	3' 2"
Height to where grain enters	4' 8"	4' 10"	5' 0"	5' 2"
Height to center of drive pulley	3' 8"	3' 10"	4' 0"	4' 2"
Speed, R. P. M. fan (drive) shaft	600	600	600	600
Size driving pulley	8" x 3"	10" x 3"	8" x 4"	10" x 4"
Capacity, pounds per hour	1800	2700	4200	8100



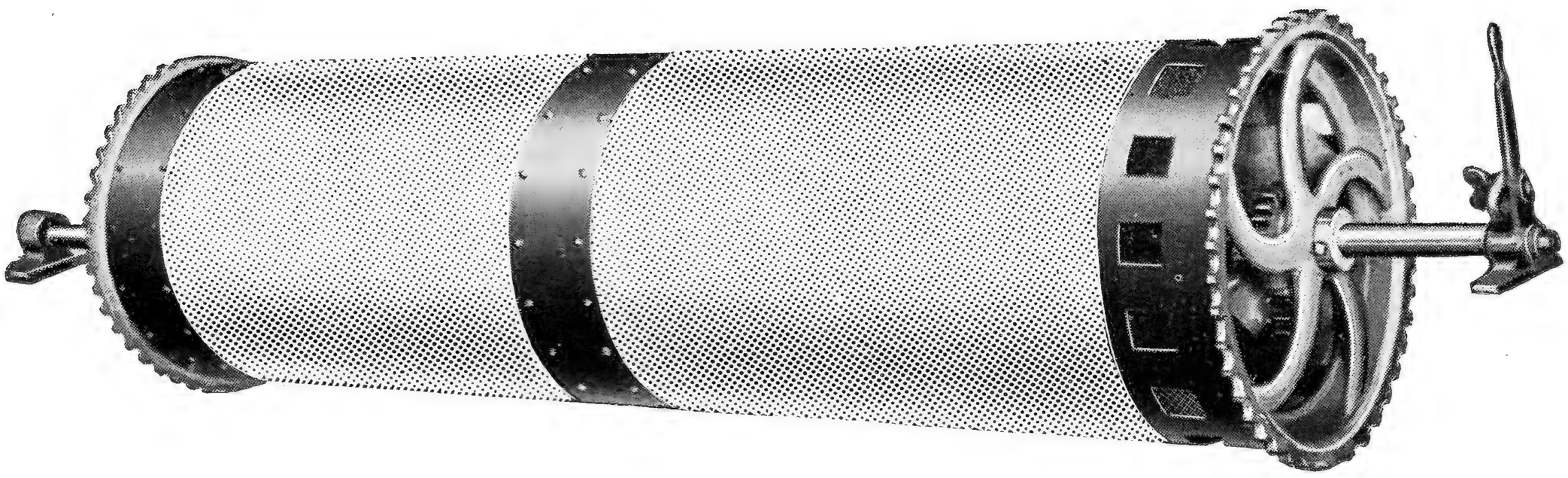
MONITOR MAGNETIC SEPARATOR

AUTOMATICALLY removing all particles of steel and iron (such as screws, nails, nuts, bolts, wire, etc.) from rice, this simple little machine works a big benefit to the rice miller. Injury, breakage, perhaps a shut-down often results from carelessness in allowing pieces of iron or steel to remain in rice when being milled. Entirely automatic, occupying small space, no care other than oiling, and taking but one-quarter or less horse power, this machine is too valuable an outfit to be overlooked by the rice miller. Magnets used are our own make, of special analysis steel, tempered and charged by our perfected process—each magnet has a lifting strength of 21 pounds. Magnets are banked in rows in such a manner as to insure lasting strength. An adjustable feed gate and revolving force feeder are provided for the feed hopper, these controlling feed and distributing stream of rice evenly across entire magnetized surface; this surface is automatically cleaned by a wiper attached to endless carrier which has adjustable take-up. All metal is caught and held on the magnetized plate, to be carried off at intervals by the automatic wiper, and delivered into box at side of machine.

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	255	256	257	258	259	260	261	262	263	264	265
Extreme height	2' 2"	2' 2"	2' 2"	2' 2"	2' 2"	2' 2"	2' 2"	2' 2"	2' 2"	2' 2"	2' 2"
Extreme depth	1' 7"	1' 7"	1' 7"	1' 7"	1' 7"	1' 7"	1' 7"	1' 7"	1' 7"	1' 7"	1' 7"
Extreme width	2' 9"	3' 1"	3' 7"	4' 1"	4' 7"	5' 1"	5' 7"	6' 1"	6' 7"	7' 1"	7' 11"
Size of driving pulley	6" x 2"	6" x 2"	6" x 2"	7" x 3"	7" x 3"	7" x 3"	7" x 3"	7" x 3"	8" x 3"	8" x 3"	8" x 3"
Speed, R. P. M.	15	15	20	20	20	20	25	25	25	25	25
Capacity, pounds per hour	1600	2200	3600	5000	6300	8000	10000	12000	15000	18000	21000
Horse power to operate	1/8	1/8	1/8	1/8	1/8	1/4	1/4	1/4	1/4	3/8	3/8
Approx. cubic feet crated for export	12	15	18	20	22	24	26	28	30	33	37
Net weight of machine, pounds	115	140	165	200	230	275	320	365	410	470	550
Approx. gross weight, pounds	185	235	282	321	360	412	450	520	580	675	800

For prices see current price book.



MONITOR INDENTED CYLINDERS

For Extracting Seeds and Broken Rice

WITHOUT the assistance of indented cylinders the rice miller cannot remove certain foul seeds from his stock. In all rice there are seeds of size and shape so similar to that of the rice that perforated screens fail to separate them, so close in weight to the grains of rice that air separations fail to discriminate between them; singularly enough these separations which prove an obstacle to the most elaborate systems of air and screen cleaning machinery are effectively performed by one of the simplest of modern rice mill machines—the indented cylinder. And again, this same simple type of machine is vastly important to the miller in removing the half and broken grains from the whole rice, and is, therefore, necessary in all grading work.

Easily installed at a trivial expense, at any place most convenient in the mill, operating with very light power, requiring no care, and giving perfect service for years without expense for renewals, our "Monitor" Cylinders are a big factor in producing high-percentage yields of clean, whole rice.

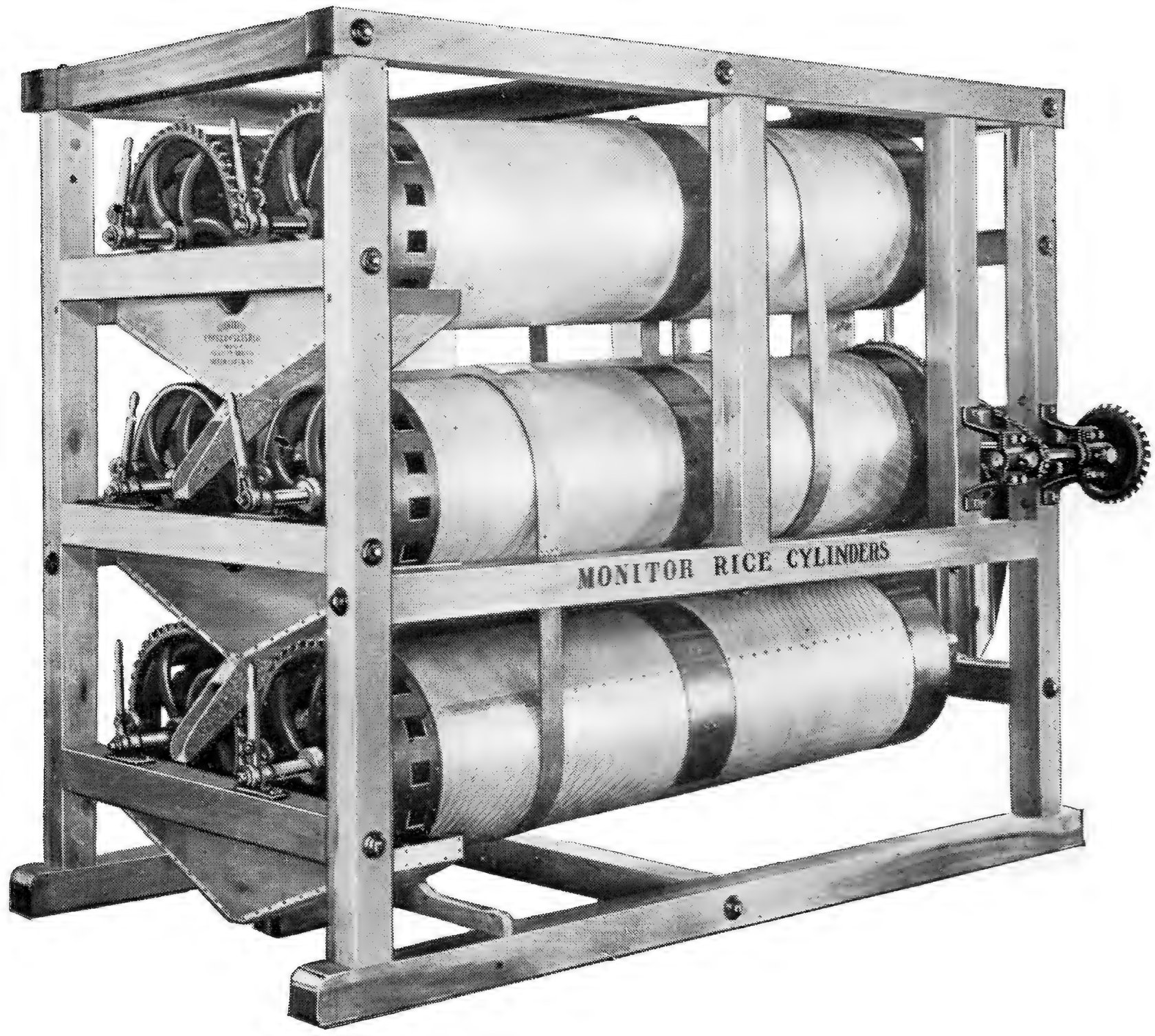
Following our fixed policy of persistently improving and refining, our "Monitor" Cylinders are in an advanced state of perfection; their advantageous features are:—Extraordinarily heavy construction; positive, easily regulated adjustment; faultless workmanship; nicety of fit; uncommonly heavy metal for the indented shell, and our improved method of indenting same (an important feature); uniform performance at full rated capacities, and durabilitity which withstands years of hard usage. Cylinders are furnished complete, as shown, having adjusting lever, bearing for each end of shaft and driving sprocket (drive may be from belt or link chain as desired).

For Large Capacity. On the pages 36 and 37 we illustrate batteries of three and six cylinders, mounted in substantial supporting frames; where capacity exceeding the single cylinders is wanted these can be supplied up to twenty cylinders in one frame.

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	1	2	3	4	5	6	7	8	9	10	11
Diameter of cylinder	20"	20"	22"	22"	24"	24"	24"	24"	26"	28"	30"
Extreme length	8' 1"	9' 1"	8' 1"	9' 1"	8' 1"	9' 1"	10' 4"	10'10"	10'4"	10'4"	10'4"
Length of cylinder	6' 3"	7' 3"	6' 3"	7' 3"	6' 3"	7' 3"	8' 5"	8'11"	8' 5"	8' 5"	8' 5"
Speed—R. P. M.	15 to 18	15 to 18	14 to 17	14 to 17	13 to 16	13 to 16	13 to 16	13 to 16	13 to 16	13 to 16	13 to 16
Capacity, bushels per hour	20	25	30	35	40	45	50	55	60	65	70
Shipping weight, pounds	600	650	650	700	700	750	800	850	800	900	950
Approx. cubic feet crated for export	28	32	34	36	40	45	50	55	60	65	70
Net weight, pounds	360	385	400	420	432	450	468	490	510	550	600
Approx. gross weight crated for export, pounds	600	640	665	700	720	750	800	890	980	1070	1160
Horse power to operate	1/8	1/8	1/4	1/4	3/8	3/8	1/2	1/2	5/8	5/8	5/8

For prices see current price book.



MONITOR INDENTED CYLINDERS

For Extracting Seeds and Broken Rice

A direct-connected, self-contained outfit of three "Monitor" Cylinders completely equipped, ready to attach drive belt.

FRAME. Note the massive supporting frame, which is best quality, air dried hardwood; frame is machine mortised and tenoned—put together with heavy joint bolts, with locked nuts and large washers under heads——Bearings have compression lubricators ——Driving mechanism is for heavy service——Fittings throughout are the best that high grade, selected materials and skilled workmanship can produce——Observe that this "three-high" grouping is a saver of floor space and is an easy outfit to take care of.

NOTE:—We also build the "three abreast" where floor space is ample—in which case feed conveyor is provided: Photos, specifications and prices upon application.

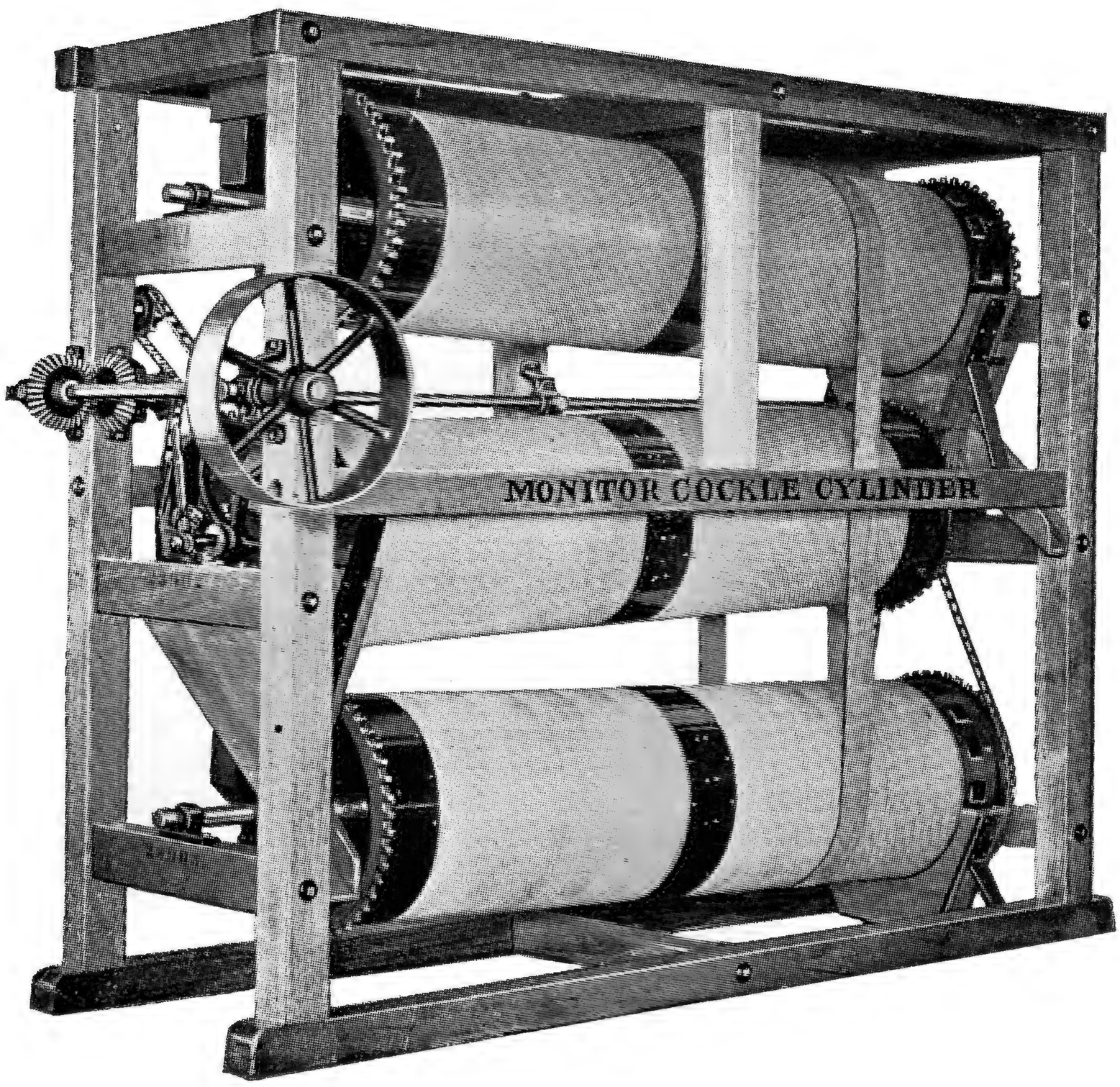
Read carefully page 34 descriptive of our cylinders.

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	31	32	33	34	35	36	37	38	39	310	311
Extreme height	7' 4"	7' 4"	7' 10"	8' 0"	8' 6"	8' 8"	8' 8"	8' 8"	9' 2"	9' 9"	10' 2"
Extreme length	9' 8"	10' 8"	9' 8"	10' 8"	9' 8"	10' 8"	11' 11"	12' 5"	11' 11"	11' 11"	11' 11"
Extreme width	4' 0"	4' 0"	4' 4"	4' 4"	4' 6"	4' 6"	3' 11"	3' 11"	4' 2"	4' 4"	4' 6"
Length on floor	8' 6"	9' 6"	8' 6"	9' 8"	8' 8"	9' 8"	10'11"	11' 5"	10' 11"	10' 11"	10' 11"
Width on floor	3' 1"	3' 1"	3' 3"	3' 3"	3' 6"	3' 6"	3' 6"	3' 6"	3' 8"	3' 10"	4' 0"
Height to where grain enters	7' 4"	7' 4"	7' 10"	8' 0"	8' 6"	8' 6"	8' 8"	8' 8"	9' 2"	9' 8"	10' 2"
Height to center of driving pulley	4' 9"	4' 9"	4' 11"	4' 11"	5' 2"	5' 2"	5' 8"	5' 8"	6' 0"	6' 4"	6' 8"
R. P. M. of driving shaft	85	85	85	85	85	85	85	85	90	90	100
Size of driving pulley	20"x4"	20"x4"	20"x 4"	20"x 4"	20"x 4"	20"x 4"	20"x 4"	20"x 4"	20"x 5"	20"x 5"	20"x 5
Capacity, bushels per hour	60	75	90	105	120	135	150	165	180	195	210
Horse power	¾	¾	1	1	1¼	1½	1½	1¾	2	2¼	2½
Approx shipping weight lbs.	2500	2700	2700	2900	2910	3200	3500	3700	3900	4100	4300
Net weight for export	1400	1600	1800	2000	2050	2300	2600	2800	3000	3200	3400
Approx. cubic feet boxed for export	202	212									

ALL DIMENSIONS ARE APPROXIMATE AND SUBJECT TO CHANGE

For prices see current price book.



MONITOR INDENTED CYLINDERS

For Extracting Seeds and Broken Rice

FOR six-cylinder capacity, where floor space is limited, this outfit is a favorite with the practical rice miller. This is easily the most complete and the simplest arranged mounting of six cylinders yet devised. Note, we have dispensed with conveyor delivery at tail, using spouts instead—discharge is by gravity, a simpler, more satisfactory method.

For substantial construction, ease of manipulation, perfect regulation and smooth action this outfit cannot be equalled. This is a direct-connected, self-contained set, completely equipped, ready to attach belt. The illustration shows the large proportions of the massive hardwood frame, which supports the outfit—see "FRAME" Construction described on opposite page. Every part of the outfit is designed for the use of those critical buyers who purchase on trial and pay when satisfied; we know it to be supreior to anything manufactured—and it is so guaranteed.

Read carefully page 35.

SPECIAL outfits, mounted cylinders up to 20 in a frame are built by us. Photos, measurements and prices on application.

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	61	62	63	64	65	66	67	68	69	610	611
Extreme height	7' 4"	7' 4"	7' 10"	7' 10"	8' 6"	8' 6"	8' 6"	8' 6"	9' 0"	9' 6"	10' 0"
Extreme length	10' 0"	11' 0"	10' 0"	11' 0"	10' 0"	11' 0"	12' 1"	12' 7"	12' 1"	12' 1"	12' 1"
Extreme width	7' 4"	7' 4"	7' 6"	7' 6"	7' 10"	7' 10"	7' 10"	7' 10"	8' 4"	8' 8"	9' 0"
Length on floor	8' 6"	9' 6"	8' 6"	9' 8"	8' 8"	9' 8"	10' 11"	11' 5"	10' 11"	10' 11"	10' 11"
Width on floor	5' 0"	5' 0"	5' 2"	5' 5"	5' 9"	5' 9"	5' 9"	5' 9"	6' 2"	6' 6"	6' 10"
Height to where grain enters	7' 4"	7' 4"	7' 8"	7' 10"	8' 6"	8' 6"	8' 6"	8' 6"	9' 0"	9' 6"	10' 0"
Height to center of driving pulley	4' 3"	4' 3"	4' 3"	4' 3"	4' 6"	4' 6"	5' 5"	5' 5"	5' 8"	5' 11"	6' 2"
R. P. M. of driving shaft	85	85	85	85	85	85	85	85	90	90	100
Size of driving pulley	24"x6"	24"x6"	24"x 6"	24"x 6"	24"x 6"	24"x 6"	24"x 6"	24"x 6"	24"x 7"	24"x 7"	24"x 7"
Capacity, bushels per hour	120	150	180	210	240	270	300	330	360	390	420
Horse power	1¼	1⅞	1¾	2	2¼	2½	2½	3	3½	4	4½
Approx. shipping weight lbs.	4000	4200	4400	4600	4800	5000	5200	5600	6000	6200	6400
Net weight for export	2900	3100	3300	3500	3700	3900	4100	4200	4600	4800	5000
Approx. cubic feet, export											

ALL DIMENSIONS ARE APPROXIMATE AND SUBJECT TO CHANGE

For prices see current price book.

MONITOR RICE GRADER AND CLEANER

WITH FANS—LIKE CUT

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	3	4	5	6	7	8
Extreme height	9' 3"	9' 3"	9' 3"	9' 6"	9' 6"	9' 6"
Extreme length	8' 0"	8' 0"	8' 0"	8' 0"	8' 0"	8' 0"
Extreme width	5' 0"	5' 8"	6' 6"	7' 2"	7' 10"	8' 6"
Size on floor	7' 7"x 4' 6"	7' 7"x 5' 0"	7' 7"x 5' 6"	7' 7"x 6' 0"	7' 7"x 6' 6"	7' 7"x 7' 0"
Height to where rice enters	8' 9"	8' 10"	8' 11"	9' 0"	9' 0"	9' 0"
Height to center of drive pulley (fan shaft)	7' 6"	7' 6"	7' 6"	7' 6"	7' 6"	7' 6"
R. P. M. fan (driving) shaft	550	550	550	500	500	500
Size drive pulley	10" x 5"	12" x 5"	12" x 6"	14" x 6"	14" x 7"	16" x 7"
Total square inches of both fan outlets	216	243	270	326	341	372
Capacity, pounds per hour	1750	2100	2450	2800	3150	3500
Horse power to operate	3½	4	4½	5	5¾	7
Approximate cubic feet crated for export	300	340	380	420	460	500
Net weight of machine, pounds	2400	2700	2950	3150	3450	3800
Approximate gross weight crated for export, pounds	3700	4100	4400	4700	5200	5700

For prices see current price book.

BUILT WITHOUT FANS—A GRADER ONLY

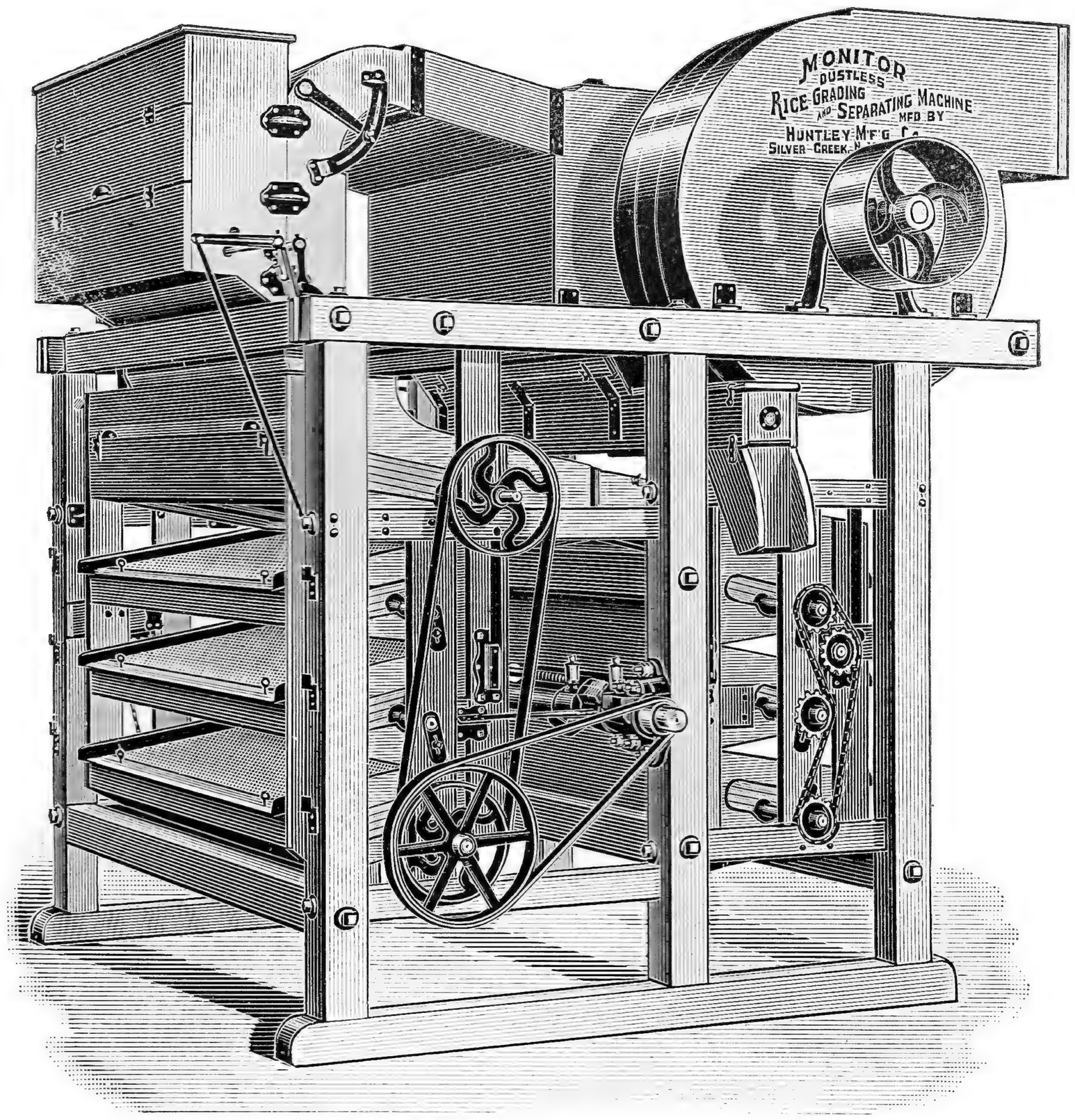
DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	3	4	5	6	7	8
Extreme height (where rice enters)	8' 3"	8' 4"	8' 5"	8' 6"	8' 6"	8' 6"
Extreme length	8' 0"	8' 0"	8' 0"	8' 0"	8' 0"	8' 0"
Extreme width	5' 7"	6' 1"	6' 7"	7' 2"	7' 8"	8' 2"
Size on floor	7' 7"x 4' 6"	7' 7"x 5' 0"	7' 7"x 5' 6"	7' 7"x 6' 0"	7' 7"x 6' 6"	7' 7"x 7' 0"
R. P. M. shaker (driving shaft)	600	600	600	600	600	600
Size driving pulley (on shaker shaft)	10" x 3"	10" x 3"	10" x 3"	12" x 4"	12" x 4"	12" x 4"
Capacity, pounds per hour	1750	2100	2450	2800	3150	3500
Horse power to operate	¾	¾	1	1	1¼	1½
Approximate cubic feet crated for export	260	300	335	370	405	440
Net weight of machine, pounds	2100	2300	2500	2700	2950	3250
Approximate gross weight crated for export, pounds	3200	3500	3750	4000	4400	4800

For prices see current price book.

CONSTRUCTION—EQUIPMENT

The screens are carried in two vibrating shoes; drive for same is our perfected, reciprocating (counterbalanced) design——Automatic sieve cleaners for each screen—these are adjustable, and the main bearings for same have compression oilers——Easily removable, all screens are interchangeable. Screen frames are uncommonly durable construction, accurately fitted and clothed with heavy metal——Shaker and fan (when used) shafts are large diameter, best quality steel, machine sized, and——these operate in heavy-duty, self-oiling bearings, illustrated page 17 (regular, chain or ring oilers; at extra price, self-aligning ball bearings)——Shaking motion to the two shoes is from one shaker shaft, imparted by four massive eccentrics—our adjustable, dust-proof, self-oiling design, illustrated on page 18——Feed hopper is equipped with adjustable feed gate and vibrating feeder——Fans (when machine is supplied for air cleaning) are large, low-speed, one-piece type and operate with valves to control suction——Further details of construction will be found under the heading "Construction", page 4.



MONITOR RICE GRADER AND CLEANER

NOTE:—Illustration shows a "Monitor" built with fans which provides for an air cleaning of the rice as it enters machine.—If it is not desired to combine air cleaning with grading this machine is supplied without fans—see table, opposite page.

MEETING every demand of the rice miller who grades to consistent standards and demands a wide range of work, this machine operates with unequalled simplicity and dependability. Its trueness of grading and adaptability are features deserving close study.

Compared to a reel it has many advantages—it takes less space for the same capacity; is self-cleaning (cleans itself in a few seconds—never any mixing); has a milder action which eliminates the breakage and waste of a reel; delivers truer grades, and is adaptable to a greater variety of grading operations. Its range of work is practically unlimited—has large screen surface, consisting of several interchangeable sections (easily and quickly changed) these, with extras having varying sizes of perforations enable the user to change to finer or coarser grades as desired. Thus, with the slightest change in the kind or condition of the rice being handled a "Monitor" user can quickly change his grading; this free manipulation of screens insures the greatest percentage of fancy head rice at all times, a more evenly graded second head, and screenings and brewers grade to any standard desired.

Compared to "Screen" graders of other makes, this "Monitor" is superior, having wider stream and closer controlled screen operations—simple, positive sieve cleaners which automatically keep the screens clean continuously, insuring full capacity and accurate separations. Whereas "Knockers" jolt stock over screens and impair the work of the screens, our style of sieve cleaners works smoothly and in a positive and effective manner. "Monitor" screens are easily removable—no other maker produces such durable, perfectly fitting screens. Screen surface to the rated capacity is greater and the entire arrangement is simpler and easier to manipulate. Another feature—the shaking motion is our exclusive style "reciprocating" action—see page 38.

MONITOR IRON FRONT, FRICTION CLUTCH BRAN PACKER

DIMENSIONS

Extreme height	9' 8"	Diameter auger shaft	2¼"
Extreme depth	4' 2"	Bore of packing auger	1 11/16"
Extreme width	5' 1"	Speed of drive shaft, R. P. M.	190
Width of frame	2' 10"	Speed of auger shaft, R. P. M.	108
Depth of frame	1' 2"	Teeth on bevel pinion	25
Height of frame	8' 10"	Teeth on bevel gear	44
Height to center of drive shaft	8' 8"	Size drive pulley (clutch)	24" x 6½"
From center of packer to center of drive pulley	2' ½"	Horse power to operate	7 to 20
		Approximate cubic feet crated for export	150
Width inside hopper	2' 2"	Net weight, pounds	1665
Depth inside hopper	1' 2¾"	Approximate gross weight crated for export, pounds	2300
Diameter drive shaft	2¼"		

For prices see current price book.

GENERAL CONSTRUCTION AND SPECIAL FEATURES

All "Monitor" Packers have uncommonly heavy, compact construction. The main supporting frames are of heavy timbers, best quality, selected hardwood, air dried. These are machine mortised and tenoned, put together with heavy bolts, have locked nuts—and a heavy washer under the head. All castings are turned out in our own foundry, and are of best quality gray iron, each piece rigidly inspected, then carefully machined, and again inspected. Bearings are of large size, lined heavily with best grade babbitt, accurately machined and fitted. Compression grease cups used chiefly. All shafts are best quality steel, large diameter, accurately machine sized.

Gears are made from cut steel patterns and are hardened by our special process, to insure long service and smooth operation.

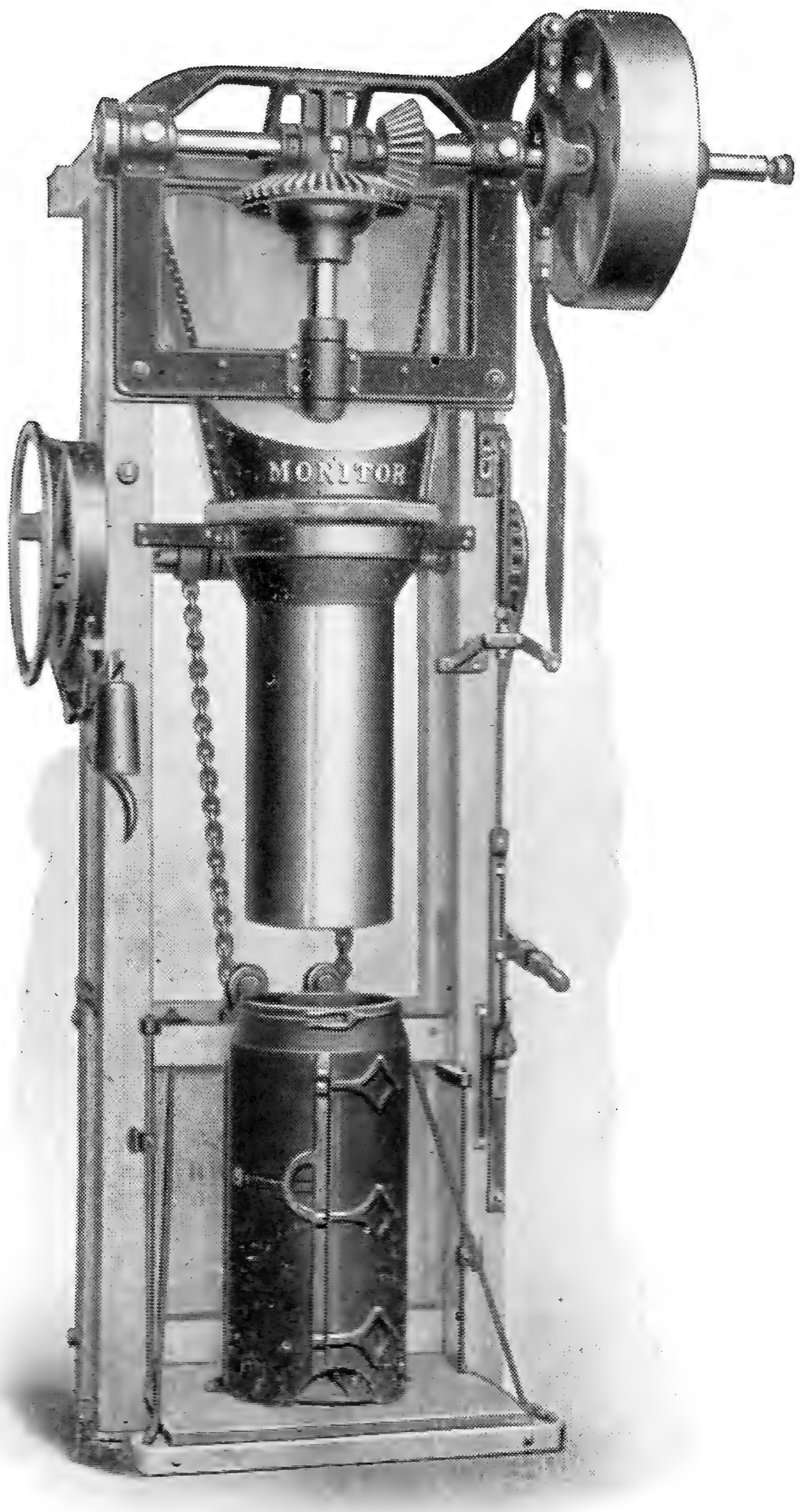
We use no springs for packing platform—platform is raised and lowered with chain and weight to insure uniform resistance during period sack is being filled.

A novel feature is our automatic arrangement which we provide for stopping platform at any desired point, this makes certain of uniform work—an even weight for each sack.

A "Monitor" clutch means no clutch trouble. They have large friction surface, heavy construction, and simple, positive adjustment. "Monitor" clutch lubrication is all that could be desired—internal lubrication.

A "Monitor" feature—the driving shaft is supported at ends, also center, by heavy bearings secured to the one-piece iron frame. Driving pinion located on this shaft can be placed at either side of the gear on the packing (auger) shaft—the motion of drive pulley may be reversed, if desired, without a change of augers. The gear on auger shaft is below the driving shaft, which permits of an uncommonly short packing shaft, also the lower bearing for same is dropped, this shortens projection of auger shaft and gives great rigidity.

Enclosing case is ultra-heavy-service type, reinforced throughout and supplied with heavy malleable door strips and hinges.



MONITOR IRON FRONT, FRICTION CLUTCH BRAN PACKER

We manufacture nine styles of packers—our special Packer Catalog sent on request.

IN this catalog we show this one style of "Monitor" Packer only, lack of space preventing our listing our full line. We selected this model knowing it comes the nearest to meeting the all around requirements of the average rice miller. Ours is one of the oldest and best known lines of packers—they are distinctive in perfected mechanical features; the principles and construction embodied in them are things we have gained a thorough knowledge of in our many years of packer designing and building. Reliable, capable performance is a certainty with a "Monitor"—we claim and guarantee the least in operating and up-keep expense, the most in capacity and uniform packing.

For continuous, hard service the packer illustrated above is a most satisfactory outfit for packing rice bran or rice hulls. A very fast packer, easy to regulate and positive in adjustment; it delivers uniform packing with very little care or attention. Power requirements, speed, uniformity of pack and light care are things essential with the experienced man—he finds this machine a leader in meeting his views in these respects. Comparison proves this machine to be of heavier and superior mechanical construction; simpler in arrangement of all driving and operating parts.

Special features are described on opposite page—under "General Construction and Special Features."

NOTE:—1. When ordering state how many pounds are to be packed to a bag.
2. Give size of sack, width and length, laid flat.
3. Whether right (as cut), or left hand drive is desired.

MONITOR DUST COLLECTOR

DIMENSIONS, CAPACITIES, ETC.

SIZE NO.	Extreme Height	Extreme Depth	Extreme Width	Speed	Size of Drive Pulley	Approximate Cubic Feet for Export	Net Weight Pounds	Approximate Gross Weight for Export	Square Feet of Cloth Surface
A- 7	5' 2"	5' 1"	4' 3"	40 to 50 Revolutions per minute	16" x 2"	175	680	1000	136
A- 8	5' 2"	5' 1"	4' 7"		16" x 2"	185	810	1190	156
A- 9	5' 2"	5' 1"	4' 11"		16" x 2"	190	890	1320	176
A-10	5' 2"	5' 1"	5' 3"		16" x 2"	200	1140	1650	195
B- 6	6' 2"	5' 8"	3' 11"		16" x 2"	170	615	940	165
B- 7	6' 2"	5' 8"	4' 3"		16" x 2"	175	700	1020	192
B- 8	6' 2"	5' 8"	4' 7"		16" x 2"	185	820	1230	220
B- 9	6' 2"	5' 8"	4' 11"		16" x 2"	200	915	1490	247
B-10	6' 2"	5' 8"	5' 3"		16" x 2"	215	1015	1775	275
B-12	6' 2"	5' 8"	5' 11"		16" x 2"	245	1220	1980	330
B-14	6' 2"	5' 8"	6' 7"		16" x 2"	290	1440	2195	385
C- 7	7' 4"	6' 9"	4' 3"		16" x 3"	215	1090	1930	280
C- 8	7' 4"	6' 9"	4' 7"		16" x 3"	245	1165	2005	320
C-10	7' 4"	6' 9"	5' 3"		16" x 3"	295	1390	2195	400
C-12	7' 4"	6' 9"	5' 11"		16" x 3"	345	1610	2335	480
C-14	7' 4"	6' 9"	6' 7"		16" x 3"	390	1835	2600	560
C-16	7' 4"	6' 9"	7' 3"		16" x 3"	440	2055	2810	640
C-18	7' 4"	6' 9"	7' 11"		16" x 3"	490	2275	3005	720
C-20	7' 4"	6' 9"	8' 7"		16" x 3"	540	2500	3345	800
F- 8	8' 5"	7' 9"	4' 7"		16" x 4"	345	2270	3140	480
F-10	8' 5"	7' 9"	5' 3"		16" x 4"	390	2320	3220	600
F-12	8' 5"	7' 9"	5' 11"		16" x 4"	420	2410	3335	720
F-14	8' 5"	7' 9"	6' 7"		16" x 4"	460	2590	3440	840
F-15	8' 5"	7' 9"	6' 11"		16" x 4"	490	2680	3535	900
F-17	8' 5"	7' 9"	7' 7"		16" x 4"	520	2720	3635	1020
F-19	8' 5"	7' 9"	8' 3"		16" x 4"	590	2840	3820	1140
F-21	8' 5"	7' 9"	8' 11"		16" x 4"	695	3090	4085	1260

For prices see current price book.

Horse power required to operate one-eighth for smallest to one-half for largest.

GOOD FEATURES

The operator has easy access to all interior parts of "Monitor" Dust Collectors—through a removable section at rear of machine. Through this opening any tube or number of tubes may be removed and replaced in a few minutes' time.

The outside circular casing is made up in sections; the inside dust drum (or cylinder) consists of two sections securely joined together. The machines are knocked down for shipment—this facilitates shipping and handling, and permits of their being taken into buildings having small entrances; they are easily reassembled and can be quickly installed at slight expense.

HOW TO SELECT THE RIGHT SIZE COLLECTOR

To determine the proper size of "Monitor" Dust Collector required, figure the number of square feet of cloth for each square inch of fan outlet opening, as follows:

Rough Rice Separators and Cleaners, 3 to 3¼ feet of cloth.

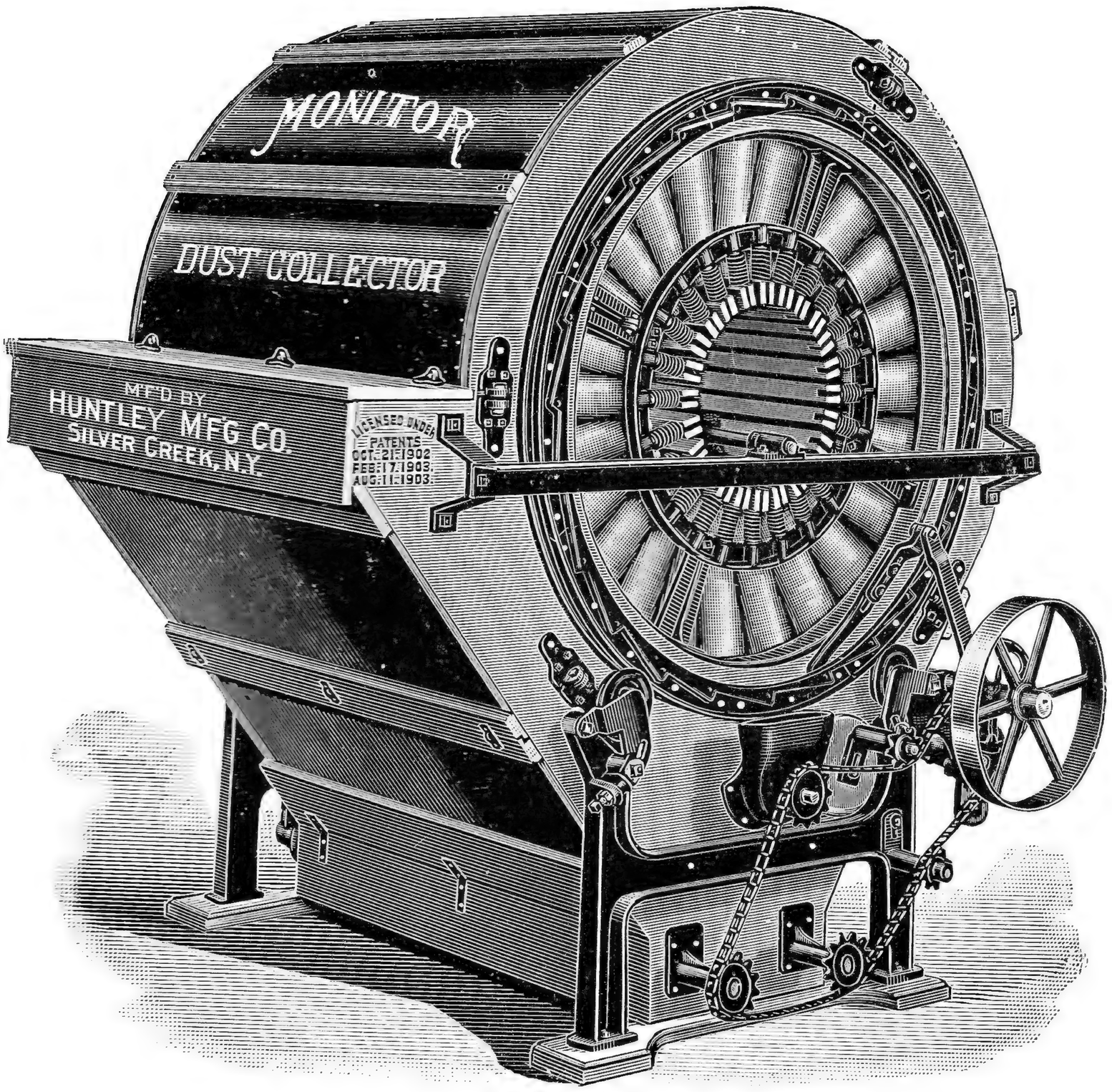
Rice Chaffers, 3 to 3¼ feet of cloth.

Rice Classiffers or Graders, 2¾ feet of cloth.

Rough Rice Clippers, 4 feet of cloth.

Aspirators, 2¾ to 3 feet of cloth.

Special Fans or Exhausters—"Monitors" may be used with fine success for taking care of the dust from same, information on request. When writing us give size, speed and make of fan, and stock it is handling.



MONITOR DUST COLLECTOR

FOR indoor use—anywhere in the rice mill. Takes care of dust from the fans of cleaning machines, or other dust-producing machines, automatically and economically. All dust collectors are not dustless—this one is, which makes it a favorite with millers who desire a clean plant. Of all "pneumatic" types of dust collectors this is unquestionably the simplest, safest, easiest operated and most durable. This is virtually two machines in one, it being a dust purifier and dust collector. Dust intake is at side into a gravity purifying chamber which separates the heavy, coarse stock (this gravitates to compartment below, and is discharged by conveyors); only light dust reaches the filtering tubes—this is the true way to handle dust on any cloth tube collector. Easily one-half (the coarse, heavy stock) never reaches the tubes—tube capacity, filtering efficiency and durability are increased 100 per cent. "Monitor" tubes are *unobstructive-discharge* pattern, during cleaning periods they stand *big end down* while our 1913 style automatic tube cleaner frees their contents effectively—"Monitor" tubes are always perfectly cleaned. "Monitor" Collectors have been specified exclusively in some of the largest dust collector contracts recently placed—they have proven best by test everywhere.

CONSTRUCTION—OPERATION

Dust laden air is piped into machine through opening in purifying chamber—this opening may be made at any point most convenient. The dust is blown into this purifying chamber, and thence out around circular casing into filtering tubes. Dust enters and discharges from big end of tubes. The drum which contains the several rows of tubes rotates intermittently, and each row of tubes is brought over a dead air chamber at frequent intervals. The fine dust (no coarse dust reaches the tubes) is discharged while the row of tubes is standing perpendicular (with the big end down) over the dead air chamber. A simple, effective knocking device strikes the bar to which the small (upper) end of tubes are fastened. All dust is instantly removed and drops down through the large end of tube into dead air chamber. A spiral conveyor carries this stock to outside of machine. The heavy dust settles in bottom of purifying chamber and is discharged by two conveyors located therein. Back-draft pipe connection is provided, at side of machine.

MONITOR PERFORATED METAL SHEETS

WE are equipped for perforating sheet metals in almost any thickness of sheet and style of perforation. In our perforating department are late design perforating machines having every improvement known to machinery of this kind—our facilities for turning out perforated sheets are unsurpassed. On the following pages we illustrate some of our standard sizes—we have many more, our large assortment of dies covers everything a rice miller or handler could need. We turn out high grade work only—a trial order will convince you.

HOW TO ORDER SHEETS

First—state what *kind* of metal, and what *thickness* (gauge) is wanted. Advise whether *round, oval* or *oblong* is wanted and give *size* of perforation by referring to illustrations on following pages. Take a sheet of paper and draw diagram, referring to diagrams "A" and "B" below. If more than one size or style of sheet is wanted make *separate diagram for each*. Mark plainly on each diagram, *length* and *width* of sheet over-all, how much *blank margin* is wanted on *sides and ends*, and, important—indicate by an *arrow* (➡) *which way* rice travels over the metal.

DIAGRAM "A"

Showing style of punching ordinarily required for a screen which *is not* cleaned with sieve cleaners—blanks on ends and sides only.

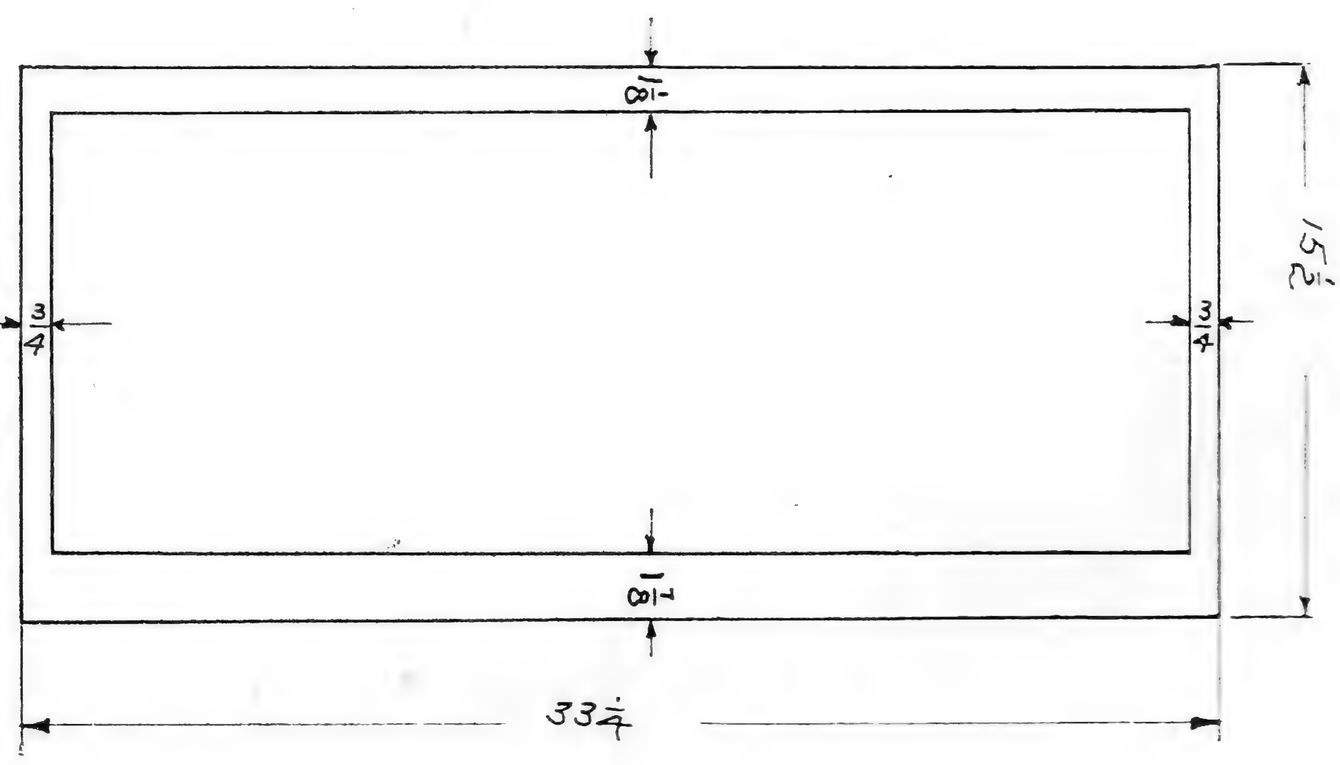
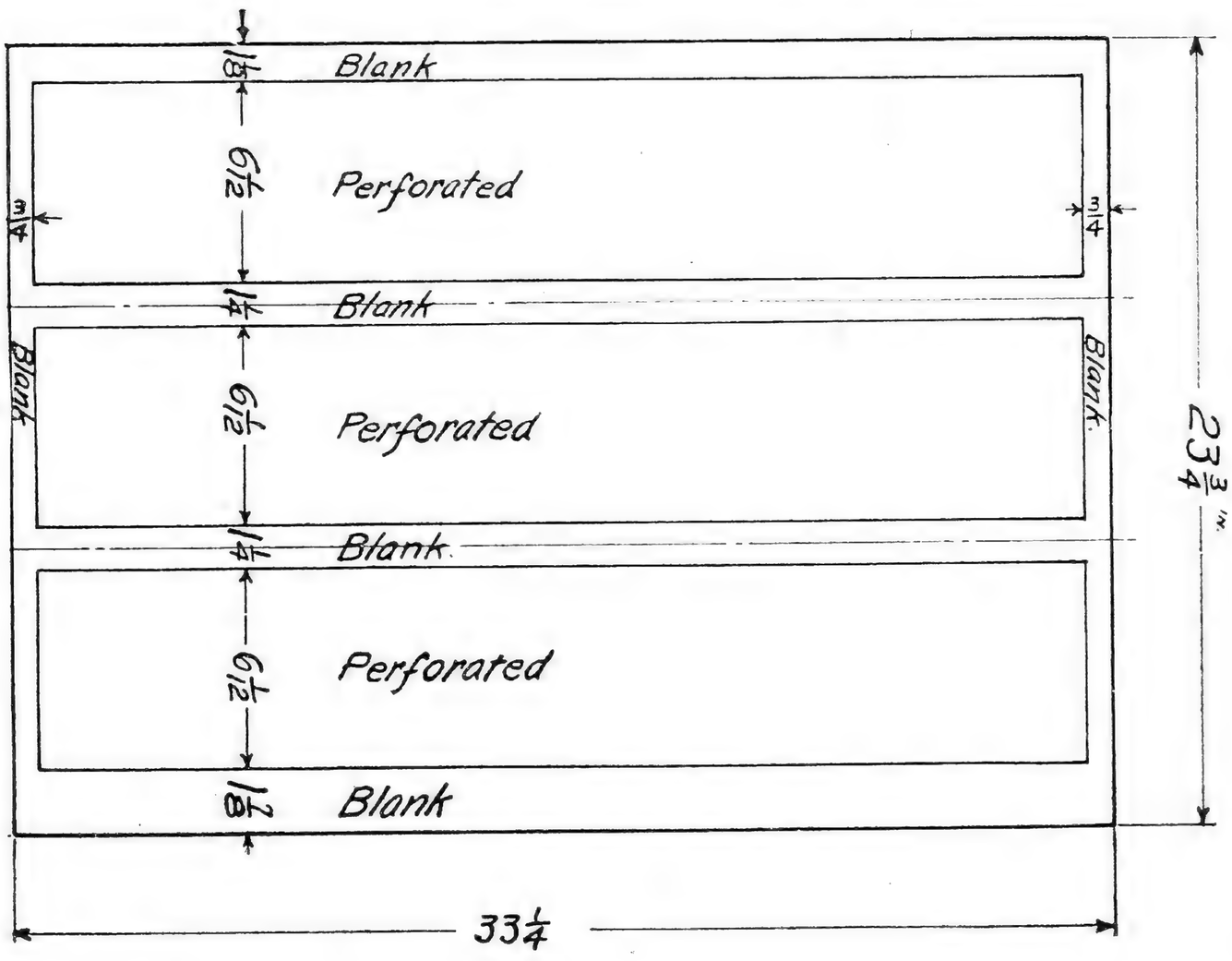


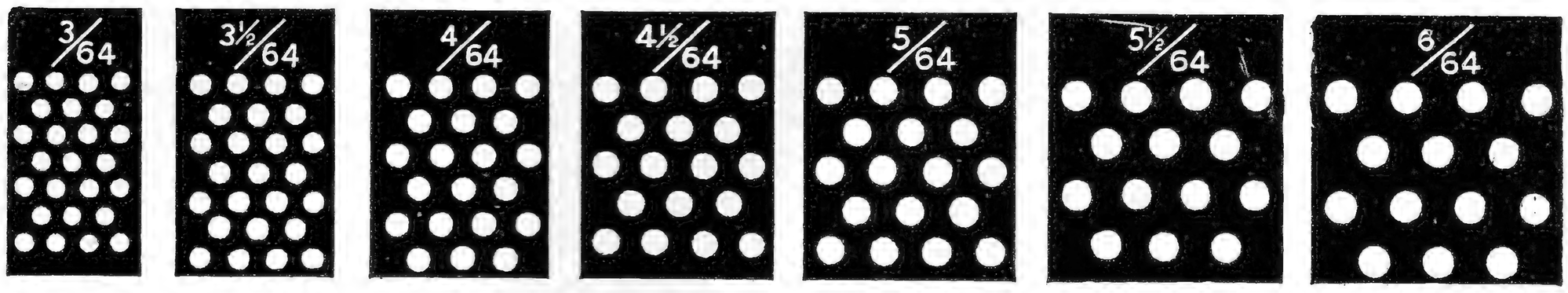
DIAGRAM "B"

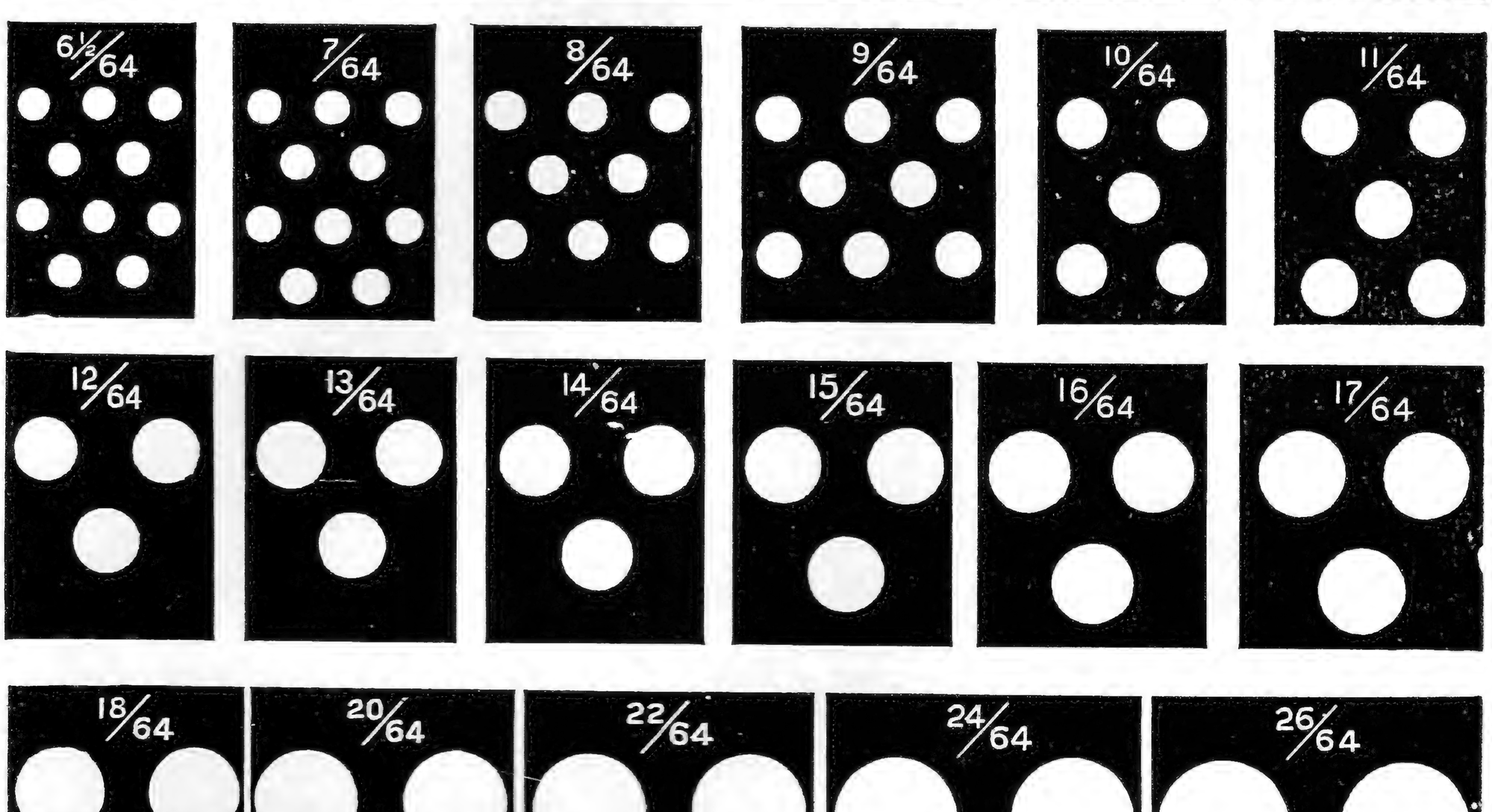
Illustrating how sheets are ordinarily perforated for a screen which has *automatic sieve cleaners*. Observe the 1¼" blanks extending across sheet which are not shown in diagram "A"—be sure to show such blanks if you require them.

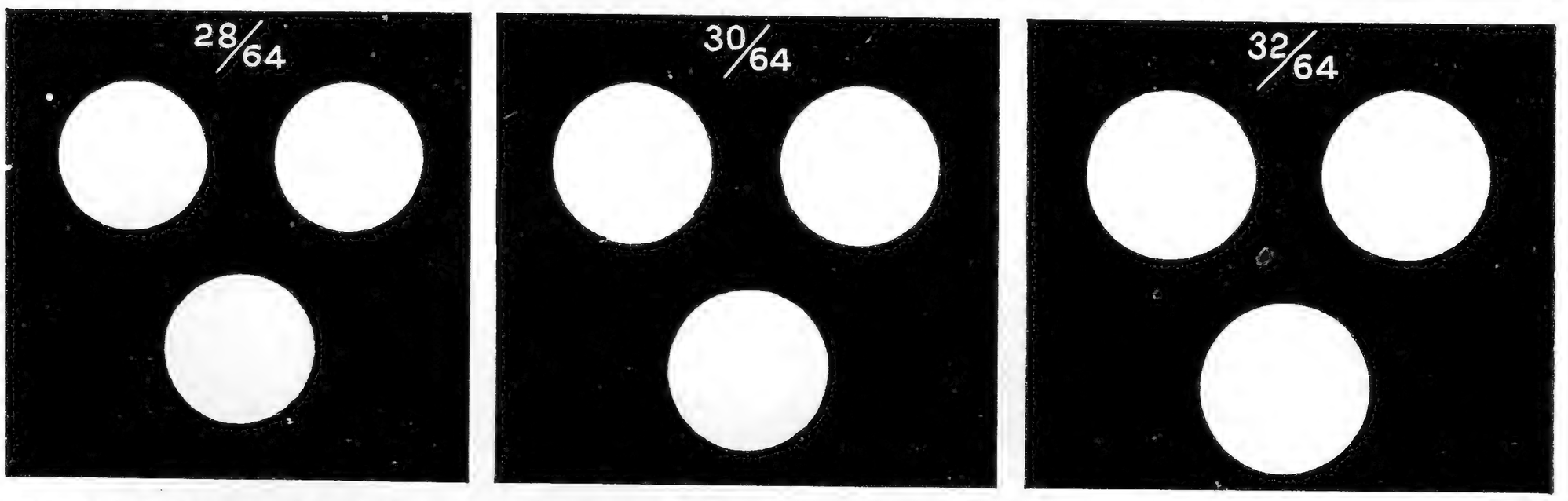


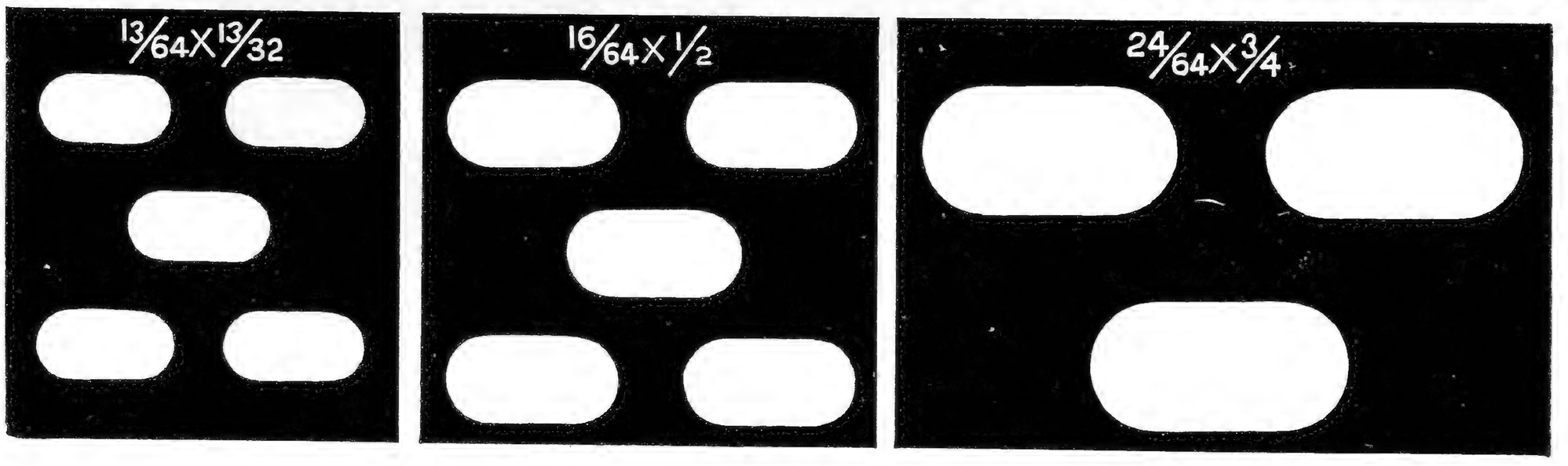
MONITOR PERFORATED METAL SHEETS

For directions in ordering see page 42



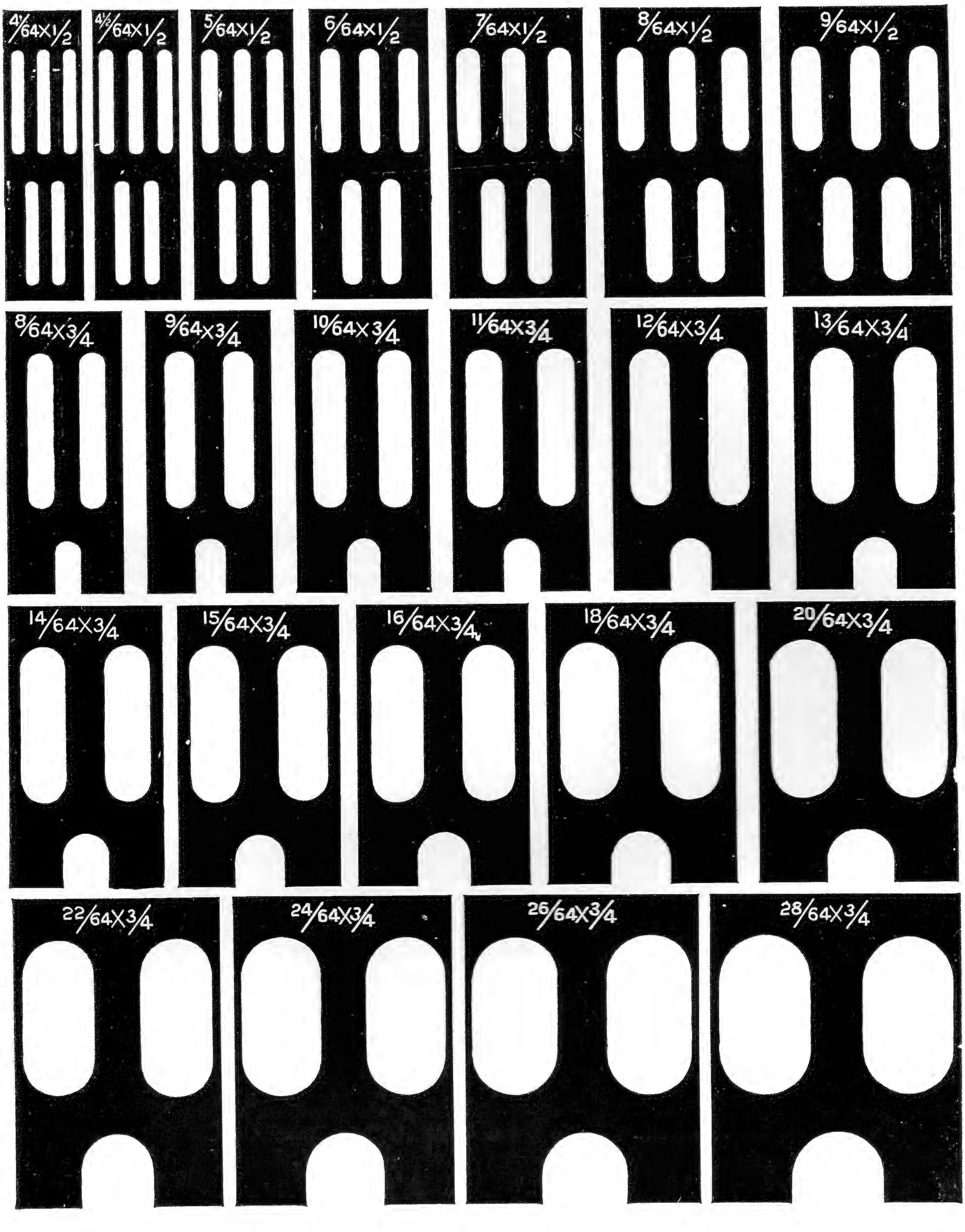






MONITOR PERFORATED METAL SHEETS

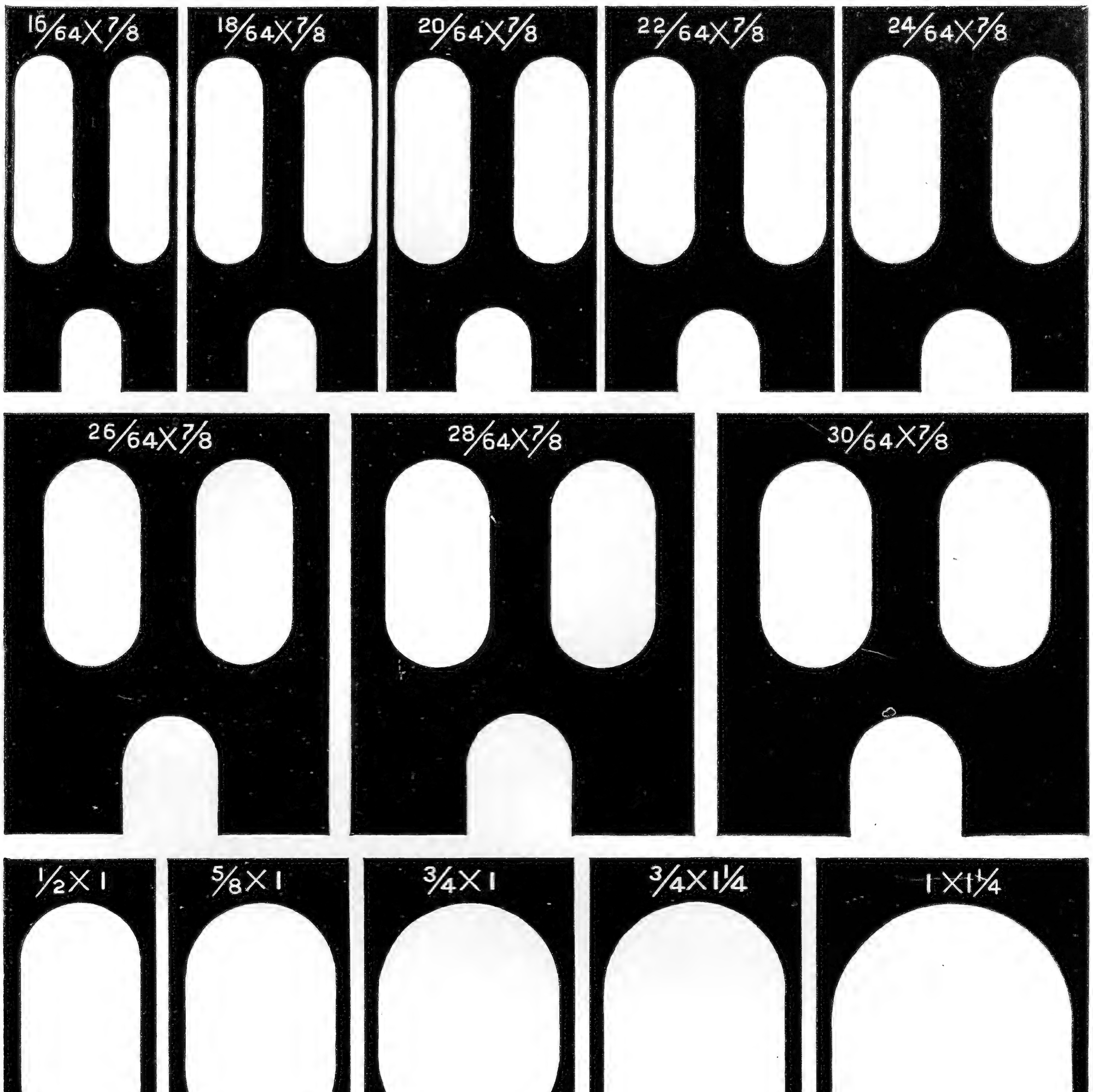
For directions in ordering see page 42



The different styles and sizes of perforations shown represent only a part of the exceptionally large assortment of dies which we carry. We have many others and can perforate in practically every size and style of hole required.

MONITOR PERFORATED METAL SHEETS

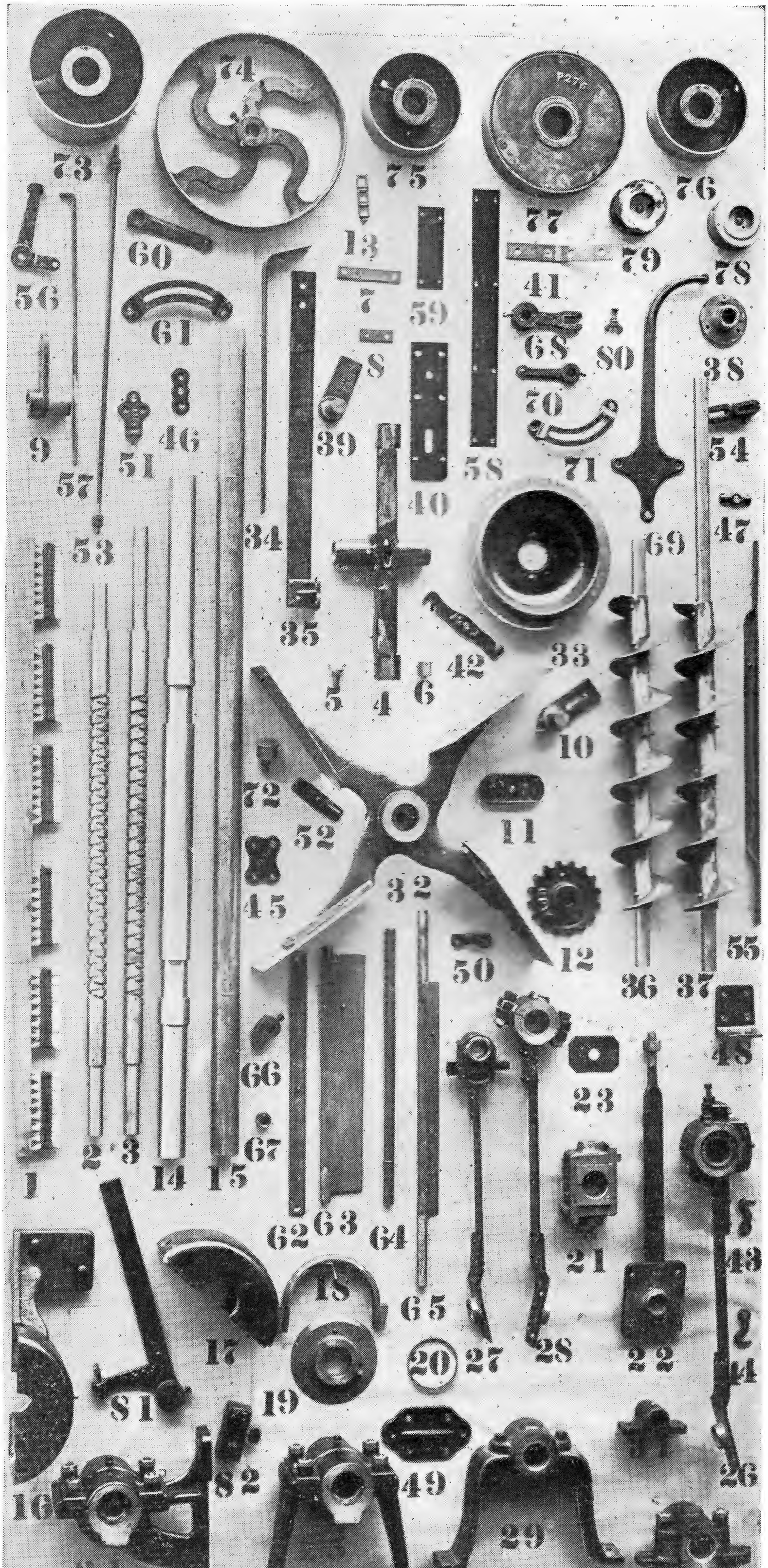
For directions in ordering see page 42



SPARE PARTS

Monitor
REGISTERED TRADE-MARK

Receiving Separators
Warehouse and Elevator Separators



REPAIR PARTS FOR SOLID SHOE MONITOR RECEIVING SEPARATORS

(See cut opposite page)

When ordering repairs for "Monitor" Separators, always give the following information about the machine for which the repairs are required:

Size of machine, i. e., No. 1, No. 6, No. 11, etc.

Name of machine, i. e., Rice Separator and Cleaner, Style E or according to its branded name.

Serial number, i. e., 2906, 36182 or whatever it may be branded.

Name of part as shown in the following list.

Number of part as shown in cut opposite.

Example: For No. 4 "Monitor" Rice Separator and Cleaner, Style E, No. 18643—
One short Conveyor No. 36
One plain fan shaft bearing No. 29.

1	Brush
2	Screw Shaft—short
3	Screw Shaft—long
4	Brush Carrier
5	Brush Yoke
6	Thimble for Yoke
7	Brush Rub Iron—long
8	Brush Rub Iron—short
9	Screw Bearing
10	Idler Stud for Screw Drive
11	Plate for Idler Stud
12	Sprocket*
13	Sprocket Chain**
14	Eccentric Shaft
15	Fan Shaft
16	Oil Tank
17	Oil Tank Cover
18	Arch for Oil Tank
19	Disc for Oil Tank
20	Oil Ring for Bearing
21	Eccentric Head—automatic
22	Eccentric Head for Auto. Eccentric
23	Splash Iron for Auto. Eccentric
24	R. O. Eccentric Shaft Bearing
25	R. O. Fan Shaft Bearing
26	Wick Oiling Eccentric, Comp.
27	Key Style Eccentric, Comp.
28	Cast Head Eccentric, Comp.
29	Plain Fan Shaft Bearing
30	Eccentric Shaft Post Box
31	Conveyor Shaft Bearing
32	Fan Spider with Blades attached
33	Saucer for Fan Case
34	Head Shoe Support Spring
35	Tail Shoe Spring with Casting
36	Short Conveyor
37	Long Conveyor
38	Conveyor Bushing
39	Idler Stud for Conveyor Drive
40	Idler Stud Plate
41	Conveyor Splice Iron
42	Double Conveyor Hook
43	Small Hook, R. H.
44	Small Hook, L. H.
45	4-Hole Splice Iron
46	3-Hole Splice Iron
47	Thumb Button—small
48	Angle Corner Iron
49	6-Hole Splice Iron
50	3-Hole Corner Iron
51	4-Hole Corner Iron
52	Cast Iron Thumb Button—large
53	Shoe Tie Rod
54	Angle Bar Holder
55	Angle Bar
56	Bell Crank
57	Valve Rod
58	Long Leg Splice Iron
59	Splice Iron
60	Valve Lever
61	Valve Circle
62	Hopper Strip
63	Wide Hopper Valve
64	Cam Shaft
65	Vibrating Valve
66	Cam
67	Valve Rod Bushing
68	Vibrating Lever
69	Jay Iron
70	Valve Lever
71	Valve Circle
72	Grease Cup
73	Pulley***
74	Pulley***
75	Pulley***
76	Pulley***
77	Counter Balance
78	Solid Pulley***
79	Collar—give bore
80	Carriage Bolt with Wing Nut
81	Feed Hopper Valve Lever
82	Feed Hopper Valve Lever Weight

*Give diameter, number of teeth and size chain

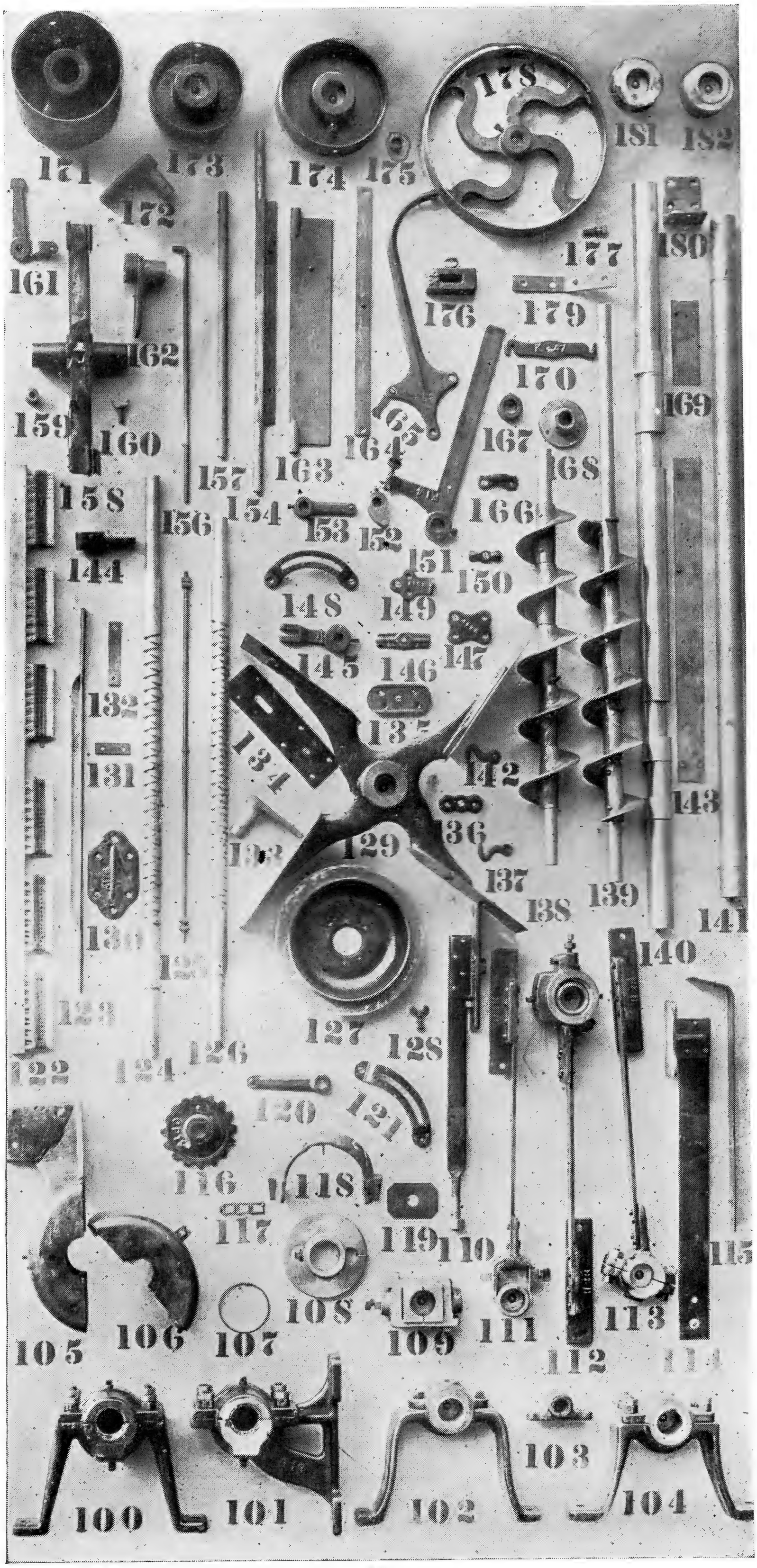
**Give number of chain and feet wanted.

***Give diameter, face and bore

SPARE PARTS

Monitor
REGISTERED TRADE-MARK

Receiving Separators
Warehouse and Elevator Separators



REPAIR PARTS FOR COMPOUND SHOE RECEIVING AND WAREHOUSE SEPARATORS

When ordering repairs for "Monitor" Separators, always give the following information about machine for which the repairs are required:

Size of machine, i. e., No. 1, No. 6, No. 11, etc.

Name of machine, i. e., Receiving Separator, Milling Separator, etc., Style A, or according to its branded name.

Serial number, i. e., 8096, 34256 or whatever number it may be branded.

Name of part as shown in the following list.

Number of part as shown on Form S. P. 2.

Example: For No. 9 Compound Receiving Separator, Style B, No. 36182—

1 Brush No. 122
1 Screw Shaft, long No. 124
6 Yokes No. 160

100 R. O. Fan Shaft Bearing
101 R. O. Eccentric Shaft Bearing
102 Plain Fan Shaft Bearing
103 Conveyor Shaft Bearing
104 Plain Fan Shaft Bearing
105 Oil Tank
106 Oil Tank Cover
107 Oil Ring for Bearing
108 Disc for Oil Tank
109 Eccentric Head—Automatic
110 Eccentric Rod for Auto. Eccentric
111 Key Style Pitman complete
112 Wick Oiling Pitman complete
113 Cast Pitman complete
114 Tail Shoe Support Spring
115 Head Shoe Support Spring
116 Sprocket
117 Sprocket Chain (give number)
118 Arch for Oil Tank
119 Splash Iron for Auto. Eccentric
120 Valve Lever
121 Valve Circle
122 Brush
123 Angle Bar
124 Screw Shaft—long
125 Shoe Tie Rod
126 Screw Shaft—short
127 Saucer for Fan Case
128 Carriage Bolt with Wing Nut
129 Fan Spider with Blades attached
130 Splice Iron—6-hole
131 Brush Rub Iron—short
132 Brush Rub Iron—long
133 Idler Stud for Brush Drive
134 Idler Stud Plate
135 Plate for Idler Stud
136 3-Hole Splice Iron
137 Small Hook, R. H.
138 Short Conveyor
139 Long Conveyor
140 Eccentric Shaft
141 Fan Shaft
142 Small Hook, L. H.
143 Long Leg Splice Iron
144 Angle Bar Holder
145 Vibrating Lever
146 Cast Screen Button
147 4-Hole Splice Iron
148 Valve Circle
149 4-Hole Corner Iron
150 Small Button
151 Feed Hopper Valve Lever
152 Cam
153 Valve Lever
154 Vibrating Valve
156 Valve Rod
157 Cam Shaft
158 Brush Carrier
159 Thimble
160 Yoke
161 Bell Crank
162 Screw Shaft Bearing
163 Wide Hopper Valve
164 Hopper Strip
165 Jay Iron (rights and lefts)
166 3-Hole Corner Iron
167 Conveyor Shaft Collar
168 Conveyor Bushing
169 Splice Iron
170 Double Conveyor Hook
171 Pulley (give diameter, face and bore)
172 Idler Stud for Conveyor Drive
173 Pulley (give diameter, face and bore)
174 Pulley (give diameter, face and bore)
175 Valve Stem Bushing
176 Feed Hopper Valve Lever Weight
178 Pulley (give diameter, face and bore)
179 Conveyor Splice Iron
180 Corner Iron for Fan and Separator
181 Collar (give bore)
182 Solid Pulley

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